Consumers Energy
Count on Us

MPSC Case No. U-17751

Consumers Energy Company

SELF-ASSESSMENT OF 2015-2019 CAPACITY PLAN FOR MEETING PEAK DEMAND PLUS RESERVES

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EXECUTIVE SUMMARY

United States Environmental Protection Agency (EPA) regulations, along with the aging of the country's coal-fueled generation fleet, are driving the shutdown of coal-fueled electric generation plants ("coal plants") across the country by 2016. This includes nine coal plants in Michigan that currently provide enough power to serve about 1 million people.

These coal plant closures include Consumers Energy Company's "Classic Seven" coal plants located in Bay, Muskegon and Monroe Counties. Emerging carbon dioxide (CO_2) emissions regulations, as proposed by the EPA's Clean Power Plan, will likely lead to more coal plant retirements nationwide after 2020.

As a result, the Midwest's reliability coordinator, the Midcontinent Independent System Operator ("MISO") is concerned about Michigan's Lower Peninsula having enough generating resources to ensure system reliability. Shrinking reserves could force the state to buy more electricity on the volatile open market, which could result in higher and less predictable energy costs for customers.

Consumers Energy has a strategic plan to continue serving its customers with affordable, reliable energy as it has for nearly 130 years. Consumers Energy has the generating capacity and demand response programs in place to reliably and affordably meet the needs of its electric customers over the five-year planning period while maintaining adequate reserve margins.

The current plan — detailed in this filing — includes utilizing a diverse mix of energy sources such as coal, natural gas, wind, hydroelectric power and other fuels to power, heat and light the state's homes and businesses for the next five years. Energy efficiency and demand response will also continue to play a key role in helping customers manage and reduce demand for electricity.

Consumers Energy is working to supply customers with the power they need whenever they need it, at affordable prices.

Planning for the future, however, is challenging because of Michigan's unique "hybrid" energy market that allows retail energy marketers to serve 10 percent of Consumers Energy's retail electric load under the Retail Open Access ("ROA") construct. The customers constituting that 10 percent can return to utility service at any time with minimal notice, making it difficult for Consumers Energy to know precisely how much electric capacity it will need to meet a sudden spike in demand and serve customers.

Despite the looming capacity shortfall in Michigan, Consumers Energy plans to fully serve its full service customers with affordable and reliable energy for the next five years.

The looming retirement of coal plants in MISO and the projected capacity shortfall in Zone 7 increases the likelihood these ROA customers will return to bundled service because alternative energy providers may be unable to secure firm, physical capacity from the market or offer competitive rates because of rapidly declining supply and correspondingly sharp increases in market prices.

The uncertainty of the current energy law is deterring investment in the next generation of cleaner energy sources that Michigan will need. Over the past six years the capacity that has been needed to meet reliability criteria in Michigan's Lower Peninsula has been almost entirely paid by the full service utility customers of Consumers Energy and DTE Electric Company. Accordingly, ROA

customers have avoided their fair share of the costs to maintain reliability. In the future, Consumers Energy does not plan to further financially burden existing utility customers with subsidizing costs of providing capacity for ROA customers which may elect to return to full service for a minimal term.

The challenges created by the looming capacity shortfall provide an opportunity to build a sustainable, long-term, Michigan-focused energy policy that moves the state forward economically while also protecting its environment.

Consumers Energy will continue to uphold its long tradition of service by ensuring a safe, reliable, affordable and sustainable energy supply for Michigan.

INTRODUCTION

The Michigan Public Service Commission ("MPSC" or the "Commission"), in its December 4, 2014 Order in Case No. U-17751, directed Consumers Energy ("Consumers Energy" or the "Company") to file a self-assessment of its ability to meet its customers' expected electric requirements and associated reserves for the five-year period of 2015 through 2019. This report responds to that Commission order.

OVERVIEW OF MICHIGAN'S CURRENT ENERGY POLICY

Planning for Electric Capacity and Creating a Fair Energy Policy for the State

For nearly 130 years, Consumers Energy has provided reliable, affordable electricity to advance its customers' quality of life. Consumers Energy remains committed to planning for and ensuring an adequate electric supply to meet the needs of Michigan homes and businesses, now and in the future. The Company's impact extends beyond merely supplying a commodity, as Consumers Energy is a vital part of the state's economic, social and environmental fabric and cares for the customers and communities it serves.

This report examines the current operating and regulatory environment and provides a detailed look at the Company's plan to meet the electric needs of its current and anticipated customer base over the next five years.

Since the current Michigan energy policy law was adopted in 2008, Consumers Energy has taken major steps to help Michigan shape a secure, stable and reliable energy landscape, including:

- Making significant investments to improve electric reliability and customer service while building a balanced and diversified energy portfolio;
- Becoming a leading supplier of renewable energy in Michigan. Consumers Energy utilizes sources such as wind, solar, hydro, landfill gas, anaerobic digestion and biomass for the electricity supplied to customers;
- Achieving the state's required standard for renewables a full year ahead of schedule and below initial cost estimates;
- Installing billions of dollars of emissions control equipment at coal-fueled generating plants to help make Michigan's air the cleanest it has been in decades;
- Installing smart meters in the Company's service territory to improve reliability, help provide customers more control over their energy use and promote energy conservation;
- Helping customers save $855 million since 2009 by creating and implementing energy efficiency programs to reduce their use of electricity and natural gas;
- Reducing electric rates by 5 to 15 percent for energy intensive businesses while keeping residential bills below the national average.[1]

Maintaining Michigan's Energy Independence

As Michigan shapes its energy policy for 2015 and beyond, Consumers Energy is committed to working with stakeholders to solve the energy-related challenges of the 21st Century and help the

[1] Includes forecasted impacts of Consumers Energy's requests in pending U-17735 2014 electric rate case and pending U-17688 cost allocation and rate design (Public Act 169) case, which are subject to MPSC approval.

state make key decisions to shape its energy future and maintain its energy independence. Consumers Energy supports a "Michigan First" energy policy that will:

- Address the regulatory structure to encourage new economic investments in capacity and reliability;
- Promote flexible, responsible and clean energy policies;
- Provide long-term price stability and ensure all customers share fairly in the cost of new capacity;
- Deliver the energy Michigan's families and businesses need while ensuring energy affordability and reliability.

Michigan's need to develop a new energy policy is urgent because new and changing federal regulations on air quality and carbon emissions will dramatically change the state's energy landscape in the next two to five years.

By 2016, at least nine coal plants will shut down across the state due to air quality rules. These include Consumers Energy's "Classic Seven" coal-fueled generating plants: two units in Muskegon (B.C. Cobb), two units in Essexville (J.C. Weadock) and three units in Erie (J.R. Whiting). Retrofitting these plants with the emissions controls necessary to comply with environmental regulations does not make economic sense for utility customers. More Michigan coal plant retirements are expected after 2020 when the federal Clean Power Plan takes effect. This impact will extend across the country.

Michigan must act now to ensure reliability for the future because plant retirements will create an electric capacity shortfall in the state. In fact, MISO, the grid operator for 15 states (including Michigan) and one Canadian province, estimates the Lower Peninsula of Michigan will fall 3,000 megawatts short of the power that homes and businesses need by 2016. Failing to address this need could have the following negative consequences:

- Reliability concerns and higher costs for customers, especially if the state is forced to rely on more power purchased from the volatile open market.
- Loss of decision-making power to ensure electric reliability, placing the state's energy future in the hands of out-of-state companies or federal regulators.

Renewable energy, energy efficiency, and other demand-side programs are key components in helping Michigan address the looming capacity shortfall while reducing emissions and helping to protect the environment. Consumers Energy's energy efficiency programs alone will save an estimated 500 megawatts – roughly the output of one new natural gas fueled power plant – from 2009 to 2020. However, reducing demand through energy efficiency or other demand-side programs alone will not be sufficient to meet the challenges that Michigan faces in the coming years.

Michigan's 'Hybrid' System Discourages Power Plant Investment

In order to meet the pending electric capacity shortfall, the state must take steps to encourage economic construction of the next generation of cleaner power plants. Michigan will need an adequate supply of electricity to power continued innovation and progress.

Unfortunately, Michigan's current unique "hybrid" energy construct does not provide the regulatory or financial certainty needed to ensure reliable electricity supply when resource scarcity exists. That is because customers comprising 10 percent of the current retail electric load obtain their power from retail energy marketers under the ROA program.

The 10 percent ROA provision (deregulation cap) arose out of political compromise at the time the 2008 energy law was passed. While Consumers Energy has plans in place to ensure adequate electricity supply for its full-service customers, the Company is not planning for or intending to supply capacity and energy for electric load currently being served by retail energy marketers. ROA customers have benefitted from a surplus of electric supply in Michigan over the past six years. The surplus of supply has given ROA customers access to electricity at depressed prices from federally regulated markets, which do not accurately value the full costs of providing electricity supply. This abundant electricity supply has been primarily paid for by the fully bundled utility customers of Michigan.

ROA customers have benefitted from a surplus of electric supply in Michigan over the past six years, which has been primarily paid for by the fully bundled utility customers of Michigan.

In other words, ROA customers have been enjoying the benefits of reliable electricity supply without having to pay for it. As Michigan moves toward an electricity shortage, Consumers Energy fears that energy marketers will not make the necessary long-term investments in new power plants to serve ROA customers. Consumers Energy will not continue to subsidize ROA customers by building excess supply for those customers, while forcing fully bundled customers to pay for that supply. This hybrid regulatory system has led to a major reliability problem for Michigan.

Michigan needs a regulated electric market that provides long-term price stability for customers and the certainty needed to make significant capital investments in electricity infrastructure such as power plants. Returning to a fully regulated electric market would create that certainty while lowering prices for utility customers across the board, as all customers would equitably share the costs of electric resource capacity.

Market Certainty Key to Meeting Long-Term Energy Needs

The uncertainty created by the current hybrid system makes the looming capacity shortfall even more challenging for utilities.

As detailed in this filing, Consumers Energy has a plan to offset the loss of its Classic Seven generating plants, which collectively represent about 950 megawatts of electric resource capacity.

That strategy includes:

- Continuing use of the renewable energy portfolio Consumers Energy has implemented ahead of the schedule required by Public Act 295;
- Purchasing a 542 MW natural gas-fired power plant in Jackson;
- Short-term capacity purchases;
- Demand-Side Management through a variety of efficiency and demand response strategies.

Many ROA customers (a handful of large businesses and industry customers in the case of Consumers Energy) left utility bundled service for the promise of lower rates on the volatile open market. Some have been able to enjoy lower rates, primarily due to the short-term oversupply of electric generation capacity that resulted from the Midwest's last boom and bust cycle. Currently, the Company's tariff allows non-residential ROA customers to return to bundled electric utility service with as little as 60 days' notice. If ROA customers return, the electric utility would then be obligated to acquire electric energy and capacity to serve these customers. Electric utilities are not required to plan for the return of ROA customers that are currently being supplied by others.

Consumers Energy is not planning to purchase long-term capacity to address the shortfall for possible returning ROA customers.

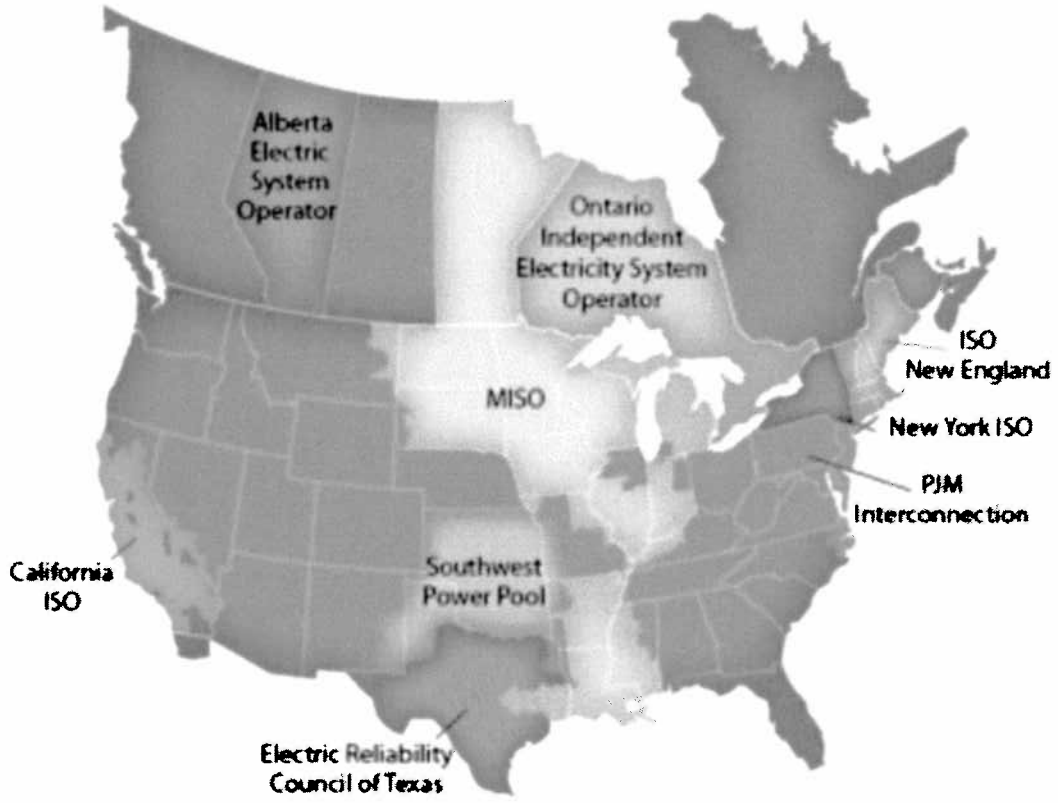
If market prices increase in the near future as expected, many ROA customers may seek to return to the stability of regulated rates. A rapid influx of large ROA customers returning to full utility service could create a capacity shortfall for Consumers Energy and could cause increased volatility in capacity prices for all customers. Consumers Energy is not planning to purchase long-term capacity to address the needs of possible returning ROA customers. Current bundled customers should not subsidize electric reliability for ROA customers.

MIDCONTINENT INDEPENDENT SYSTEM OPERATOR (MISO)

Michigan does not completely control its own energy destiny. A significant portion of the responsibility for reliability, control and monitoring of the electric grid lies with MISO.

MISO was established as the nation's first Regional Transmission Organization (RTO) by the Federal Energy Regulatory Commission (FERC) in 2001. MISO monitors the transmission network to strengthen reliability and ensure electric grid stability across 15 states and Manitoba as one integrated system (see Figure 1 below).

Figure 1: Regional Transmission Organization Territories[2]



[2] SOURCE: Sustainable FERC Project, n.d., "ISO RTO Operating Regions." Available at http://sustainableferc.org/. (accessed 1/30/15)

MISO's Energy Market

In 2005, MISO began operating energy markets to provide day-ahead and real-time market information and centralized dispatch of generation for market participants. Consumers Energy participates in the MISO market.

MISO provides all market services for energy, operating reserve and transmission service in accordance with the terms of the MISO Open Access Transmission, Energy and Operating Reserve Markets Tariff (MISO Tariff). This includes operation and settlement of the Day-Ahead Energy and Operating Reserve Market (DA Energy Market) and the Real-Time Energy and Operating Reserve Market (RT Energy Market), collectively referred to as the MISO Energy Markets. The DA Energy Market takes place on the day preceding the actual operating day and is a forward-looking market where energy and operating reserves for the next day are bought and sold. An operating day spans a 24-hour period, beginning and ending at midnight, Eastern Standard Time. The DA Energy Market is a financially binding market that provides for economic and reliable operation of the electric system for the next operating day. The RT Energy Market takes place on the actual operating day and is designed to continuously balance electric supply and demand at the lowest cost while recognizing transmission system conditions. The DA Energy Market and the RT Energy Market are designed to work together to meet electric needs in the MISO footprint each day in the most economical manner.

MISO's Ancillary Services Market

In 2009, MISO began operating its Ancillary Services Market (ASM), a collection of secondary services offered to ensure the reliability and availability of energy. The ASM provides for generation regulation, spinning and supplemental services and has both a day-ahead and real-time component. Generation regulation serves to continually balance electrical supply and demand. Spinning reserves and supplemental services provide energy to meet demand on the system in the event of a sudden and unexpected loss of generation or transmission service.

MISO's Capacity Market

Also in 2009, MISO began operation of its monthly Voluntary Capacity Auction (VCA). Under the VCA construct, Load Serving Entities (LSEs) could obtain additional capacity or sell surplus capacity for each month to meet monthly Resource Adequacy requirements. In 2013, MISO switched to a mandatory annual capacity construct, which requires all available generation in the MISO footprint to participate in the annual Planning Resource Auction (PRA), and be available for all 8,760 hours of the MISO Planning Year, which runs from June 1 to the following May 31. The forward capacity market is designed to ensure sufficient resources are in place to reliably serve load on a forward-looking basis. LSEs can meet their planning resource requirements by offering capacity resources and demand into the Planning Resource Auction through one or both of the following methods:

- Offering or self-scheduling capacity resources and bidding demand into the Planning Resource Auction;
- Opting out of the Planning Resource Auction by submitting a Fixed Resource Adequacy Plan (FRAP), offsetting capacity resources and demand against each other.

Load serving entities can satisfy their resource capacity needs by owning resources, holding a power purchase agreement (PPA) for the capacity of resources or buying capacity from the one-year forward capacity market (MISO's PRA).

Planning Reserve Margin Requirement

MISO determines the appropriate amount of capacity required to maintain electric system reliability in accordance with the reliability requirements of the states and the regional reliability organizations that have jurisdiction within the MISO Energy Market Region. ReliabilityFirst (RF), the regional reliability organization for the part of the country in which the Company operates, has an established resource planning standard that allows for interruption of firm customer demand as a result of insufficient generation resources, known as loss of load expectation (LOLE), of no more frequently than one day in 10 years. MISO has adopted this standard as well and requires all market participants to secure resources that are adequate to achieve it. MISO and the Loss of Load Expectation Working Group (LOLEWG) conduct an annual evaluation of customer demand and generators located within the MISO market footprint. This evaluation determines, absent consideration of forced outages, a capacity planning reserve margin target for MISO to satisfy ReliabilityFirst's capacity planning criteria.

Based on that evaluation, MISO establishes a Planning Reserve Margin Requirement (PRMR) applicable to each Load Serving Entity that reflects the one day in 10 year loss of load expectation.[3] To facilitate compliance with the Planning Reserve Margin Requirement, MISO has established fungible Zonal Resource Credits (ZRCs)[4], which are a measurement of each resource's available capacity after discounting for the resource's effective forced outage rate. Subsequent numbers in this report are given on an Unforced Capacity (UCAP) basis with units of ZRCs.

Under the MISO Resource Adequacy construct, the Company is required to purchase shortfall capacity needs to meet its Planning Reserve Margin Requirement, or the expected peak load plus reserves, for the entirety of each Planning Year to avoid paying a capacity deficiency charge[5]. The Company plans to meet the demand and reserve margin requirements of its full-service, or bundled, customers, but not for ROA customers who may potentially return to full utility service.

Local Resource Zones

As part of its Resource Adequacy construct, MISO has divided its footprint into nine regions, or Local Resource Zones (LRZs), acknowledging the fact that the electric transmission system is constrained. The designation of these LRZs generally follows state boundaries, as shown in Figure 2 on the following page. Michigan's Upper Peninsula is connected with Wisconsin as part of Zone 2. The Lower Peninsula is designated as Zone 7. The exception is a small part of southwest Michigan that is part of the Pennsylvania-New Jersey-Maryland (PJM) market.

Zone 7 has an expected peak demand of approximately 21,600 MW and Planning Reserve Margin Requirement of approximately 22,900 MW in Planning Year 2015/16.[6]

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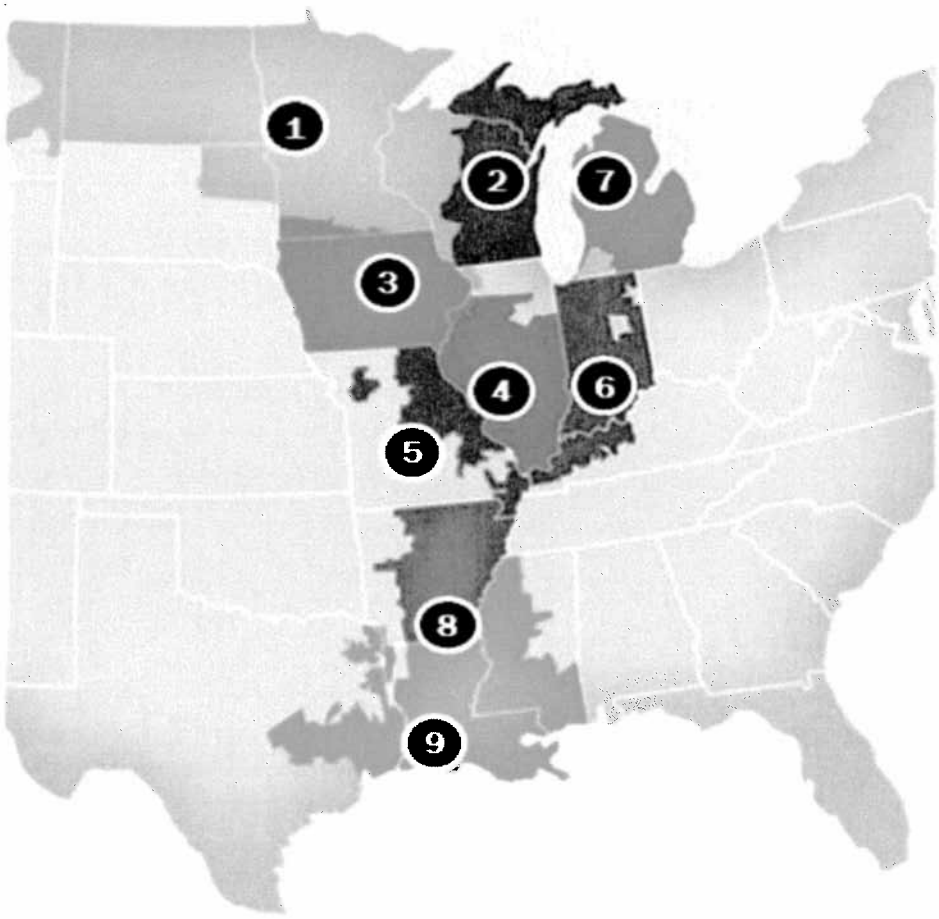
[3] The LOLE study considers the diversity of customer demand, the size and number of generating resources and the load forecast uncertainty associated with each Planning Year.

[4] A ZRC is one (1) megawatt (MW) of unforced capacity from a planning resource for a specific Planning Year, pursuant to the requirements set forth in Module E of the MISO Tariff. Unforced capacity is the installed capacity of an electric resource times the result of one minus the Equivalent Forced Outage Rate on Demand (EFORd) of that electric resource.

[5] The Capacity Deficiency Charge (CDC) is covered in the MISO Tariff in Module E-1 Section 69.A.10.a. The Tariff states that if an LSE does not meet its PRMR, it must pay the CDC. The Capacity Deficiency Charge calculation is 2.748 x LRZ CONE x number of ZRCs short. In MISO Zone 7, CONE is currently $90,530/MW-year. For example, if an LSE were 500 ZRCs short, the Capacity Deficiency Charge would be: 2.748 x 500 ZRCs x $90,530 = $124,388,220 for the year for 500 ZRCs.

[6] SOURCE: MISO 2015 LOLE Study Report and October 8, 2014 LOLEWG presentation materials.

Figure 2: MISO Local Resource Zones (LRZs)[7]



Local Reliability Requirement

The Local Reliability Requirement (LRR) is the minimum amount of unforced capacity that must be physically located in a Local Resource Zone to maintain a loss of load expectation (LOLE) of one day in 10 years, without consideration of the benefit of imports from other Zones by use of the electric transmission system. In short, the Local Reliability Requirement determines the amount of physical generation needed in a Zone if it were to be treated as an island, with no ability to obtain power from other Zones. The minimum Local Reliability Requirement is determined through the LOLE Working Group analysis by either adding or removing planning resources (electric generation) until the LOLE reaches the target of interruption of firm demand no more frequently than one occasion in 10 years.

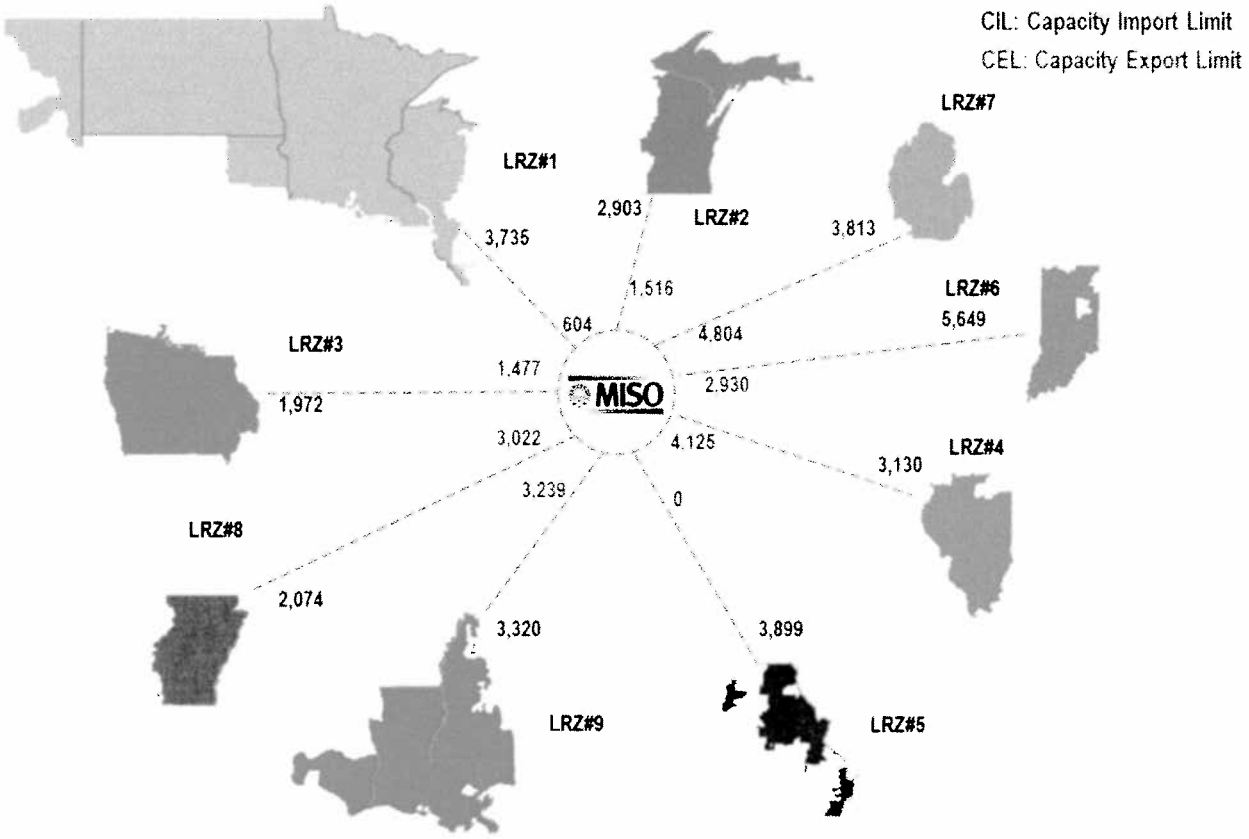
Capacity Import and Export Limits

The LOLE Working Group determines the Capacity Import Limit (CIL) and Capacity Export Limit (CEL) to and from each MISO Zone. The Capacity Import and Capacity Export limits are effectively the electric transmission import and export capacity that can be reliably depended upon to transport power between Zones.

[7] SOURCE: MISO 2015 LOLE Study Report

Zone 7 has a Capacity Import Limit of about 3,800 ZRCs for the 2015/16 Planning Year, indicating that the transmission system itself has the means to move substantial amounts of power into Zone 7. There are no physical transmission line constraints that limit power into Zone 7 until imports exceed 3,800 ZRCs. CILs and CELs for each of the MISO Zones are indicated in Figure 3 below.

Figure 3: 2015 Capacity Import and Export Limits for MISO Local Resource Zones



Local Clearing Requirement

In order to ensure adequate supply and reliability, each Zone has a Local Clearing Requirement (LCR), or the minimum amount of resources that must be physically located within the Zone taking electric transmission import capability into consideration. The Local Clearing Requirement is equal to the Local Reliability Requirement less the Capacity Import Limit for the Zone.

Depending on the outcome of MISO's Planning Resource Auction, using a multi-Zone optimization method and zonal deliverability tests, Zonal Resource Credits included in a Fixed Resource Adequacy Plan may not be transferable for use in Zones other than the Zone in which the generator is located. Load Serving Entities who submit a Fixed Resource Adequacy Plan may be subject to a Zonal Deliverability Charge (ZDC) if any Zonal Resource Credits included in the Fixed Resource Adequacy Plan are from Zones other than the Zone in which the Load Serving Entity's demand is located.

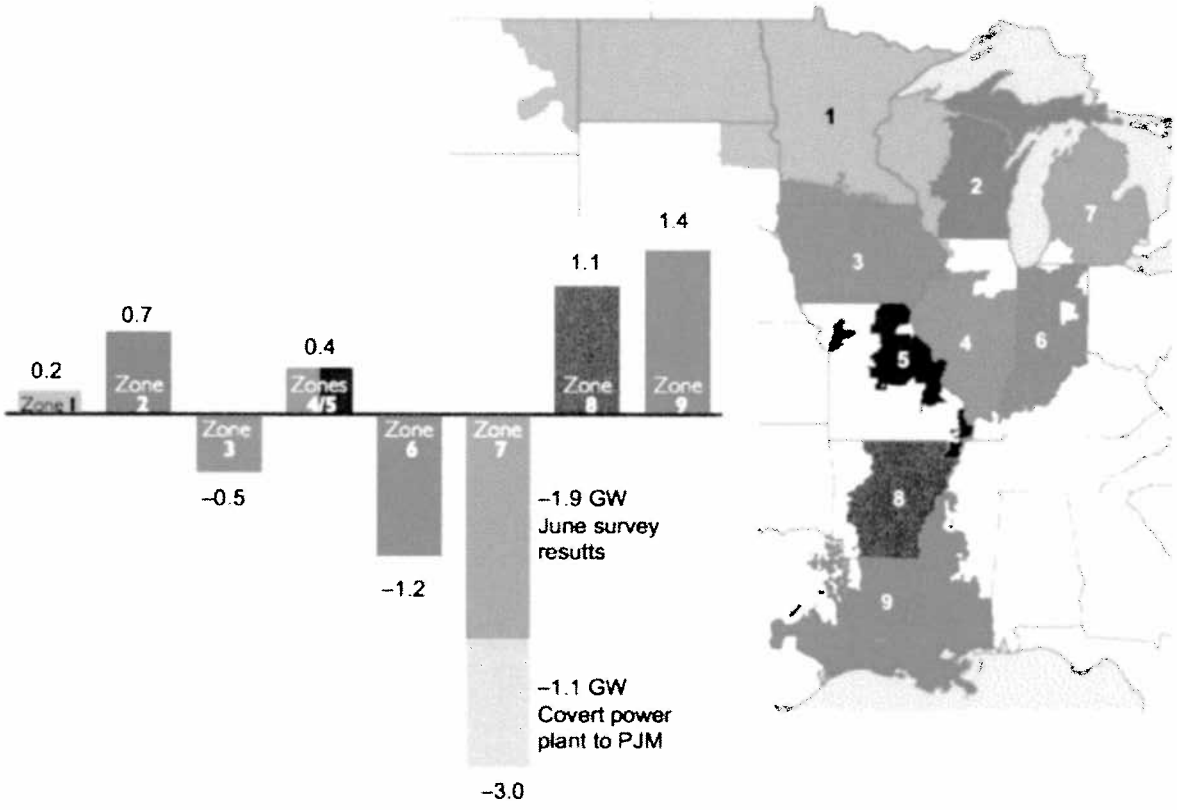
ZONE 7 RESOURCE ADEQUACY

Significant electric resource changes are about to take place that will impact the MISO capacity market. The EPA's Mercury and Air Toxics Standards (MATS) rule imposes stringent limitations on

emissions of mercury, acid gases, certain metals, and organic constituents from coal and oil fueled generating units. The MATS rule takes effect on April 16, 2015. This rule affects operations of hundreds of generating units within MISO, including all 12 of the Company's coal fueled generating units. The Company has applied for and received a one-year compliance extension from the Michigan Department of Environmental Quality, delaying the compliance date for its Classic Seven generating units and JH Campbell units until April 16, 2016. As a result of the MATS requirements, on April 16, 2016, Consumers Energy will retire its Classic Seven units, which currently provide 900 ZRCs of capacity. The Company's two DE Karn coal-fueled units will comply with MATS on its effective date (April 2015), and the Company's three JH Campbell units will comply with MATS subsequent to the one-year extension (April 2016).

The retirement of existing coal-fueled generating capacity is expected to have a significant impact on the capacity outlook for Zone 7 by Planning Year 2016/17. MISO and the Organization of MISO States (OMS) survey results have recently projected a 3,000 MW shortfall for Zone 7 for achieving its Planning Reserve Margin Requirement in Planning Year 2016/17, as shown in Figure 4 below. Unfortunately, a lack of data transparency in these numbers stemming from MISO's confidentiality policy prevents the Company from fully analyzing the details of the shortfall and determining if 3,000 MW is accurate. The Company, and other Load Serving Entities, would need access to Zonal-level shortfalls showing unit-by-unit details in order to thoroughly assess the MISO OMS survey results[8].

Figure 4: MISO Projected Capacity Shortfall by Zone (Planning Year 2016/17)[9]



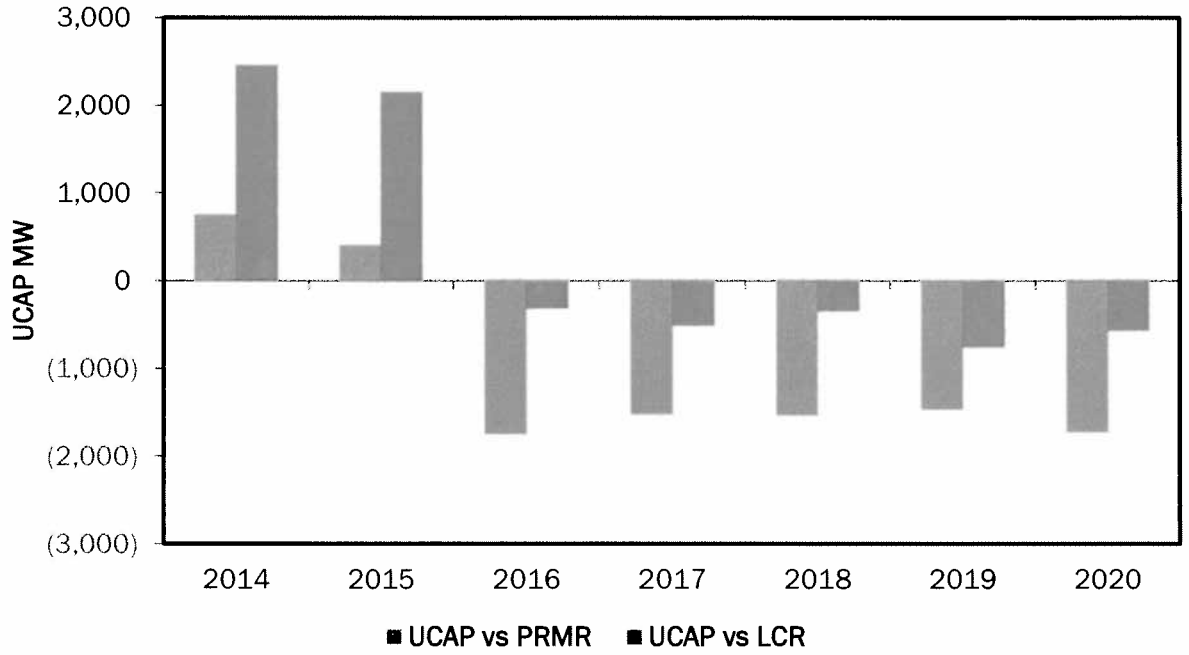
[8] Unlike MISO, PJM and the other eastern RTOs have adopted a more data-transparent approach to regional capacity outlooks and post materials disclosing unit-level detail including expected retirement dates on their websites.

[9] SOURCE: MISO. October 22, 2014. Long Term Resource Adequacy Update. Available through https://www.misoenergy.org/. (accessed 1/30/15)

The Company's internal analysis suggests the 2016 Zone 7 shortfall may be closer to 2,000 MW, as shown in Figure 5 below. Some of the variance between the Company's projection and MISO OMS outlook is attributable to uncertainty of retirement information for generation used to serve load for other LSEs (some outside of MPSC jurisdiction) such as alternative energy suppliers, municipalities and cooperatives. Furthermore, categorization of resource probability of availability in the MISO OMS survey is somewhat confusing; respondents may not be accurately reflecting their unit retirement intentions.

Although uncertainty remains around exactly how short Zone 7 will be in the coming years, the prevailing view by MISO, Consumers Energy and other industry stakeholders is that Zone 7 will not meet its Planning Reserve Margin Requirement or Local Clearing Requirement in 2016.

Figure 5: Consumers Energy Outlook of Zone 7 Capacity Position[10]



The 2015 MISO LOLE Working Group study results predict a Local Clearing Requirement of 20,900 Zonal Resource Credits (ZRCs) and Planning Reserve Margin Requirement (PRMR) of 22,900 ZRCs for the 2015/16 Planning Year. Since 20,900 ZRCs must come from within Zone 7, a maximum of 2,000 ZRCs will be imported to reach Zone 7's Planning Reserve Margin Requirement while maintaining sufficient physical generation within Zone 7 and system reliability. Though over 3,800 ZRCs can physically be brought into Zone 7 through the transmission system, only 2,000 ZRCs will be imported to Zone 7 while still complying with the Local Clearing Requirement. The retirement of the Company's Classic Seven units, DTE Electric Company's Trenton Channel Units, and departure of the independently-owned Covert natural gas-fueled generating plant for the PJM market equate to a load plus reserve margin capacity shortfall of approximately 2,000 ZRCs by the 2016/17 Planning Year.

With 2,000 ZRCs leaving Zone 7, there likely will not be sufficient resources for Zone 7 to meet its Local Clearing Requirement or Planning Reserve Margin Requirement, increasing the likelihood that capacity prices could reach the Cost of New Entry (CONE), essentially the annual levelized cost of

[10] Unforced Capacity (UCAP) vs. Planning Reserve Margin Requirement (PRMR) and Local Clearing Requirement (LCR)

building a new natural gas combustion turbine unit. Thus, although Zone 7 is interconnected to the rest of MISO with a Capacity Import Limit of approximately 3,800 ZRCs, the physical amount of generation which must be in Zone 7 will make any imports greater than 2,000 ZRCs meaningless if the Local Clearing Requirement is not met, resulting in capacity price separation with other MISO Zones. If Zone 7 is unable to meet its Planning Reserve Margin Requirement or Local Clearing Requirement, the market clearing price within the Zone will reach the CONE in upcoming years.

MISO determines the Cost of New Entry values for its entire system and for each Zone annually and files the calculated values at FERC for approval. MISO's most recent CONE filing, made on September 8, 2014, was $91,290/MW-year. A more detailed explanation of MISO's CONE methodology is provided in Appendix A-1. Historical and forecasted CONE values for MISO and Zone 7, as published by MISO, are shown in Table 1 below.

Table 1: Historical and Forecasted CONE Values ($/MW-year)

Planning Year	MISO	LRZ7
2010/11	$90,000	N/A
2011/12	$95,000	N/A
2012/13	$95,000	N/A
2013/14	$98,000	$99,310
2014/15	$90,750	$90,100
2015/16	$91,290	$90,530

PLANNING RESERVE MARGIN REQUIREMENT (PRMR)

For the 12-month period beginning June 1, 2015, MISO determined[11] an unforced capacity planning reserve margin target for MISO of 7.1 percent (as opposed to an installed capacity, or ICAP, planning reserve margin target of 14.3 percent).[12]

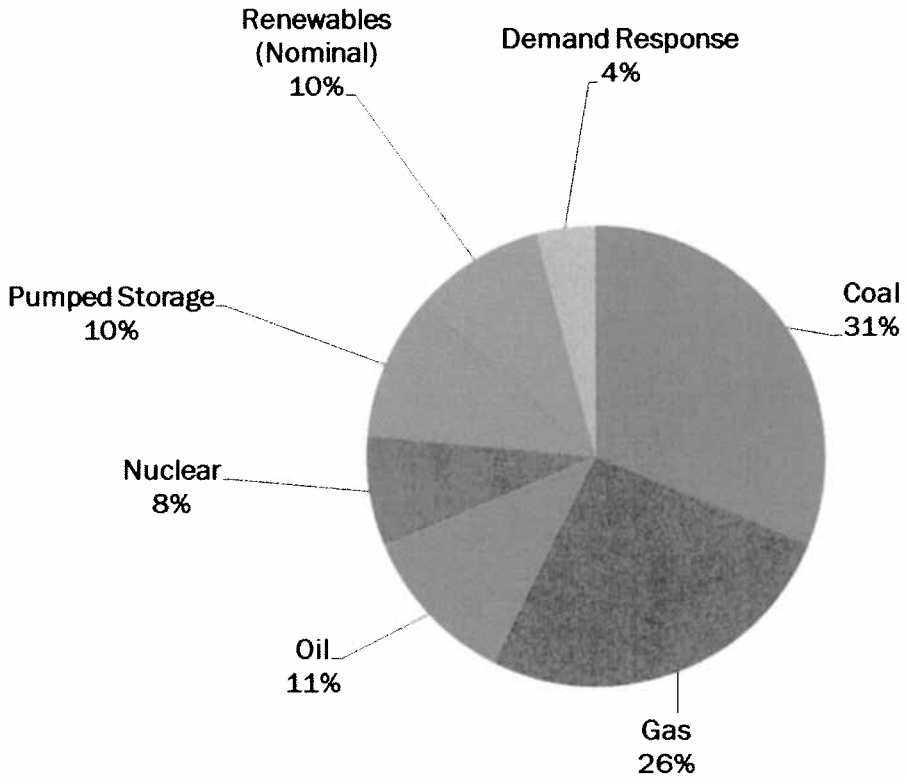
Consumers Energy continues to maintain a diverse and flexible resource portfolio, as shown in Figure 6 on the following page, and as discussed further in the Energy Resources section. The Company's resources include a balanced mix of base load, intermediate, peaking, intermittent, demand-side and storage resources to deliver energy to customers in an affordable, environmentally responsible and reliable manner.

By meeting the mandated 7.1 percent reserve margin requirement, or roughly 550 ZRCs in addition to the Company's expected peak load, Consumers Energy will adequately maintain resources to meet full service customer electricity needs throughout the year, including during peak load periods.

[11] Reserve margin target determined by the analyses of the MISO LOLEWG.

[12] Exhibit 3, Line 11 indicates the Total PRMR. For 2016-2019, the projected capacity planning reserve margin targets are similar values, ranging from 7 percent to 7.2 percent, as shown in Exhibit 3, Line 10. The Company modified the reserve margin target provided in Exhibit 3, Line 10, column (f) from what was originally published in the data template by the MPSC to be 7 percent, consistent with the 2015 MISO LOLE study results.

Figure 6: Consumers Energy Electric Capacity Breakdown for 2015[13]



PEAK DEMAND

Actuals

The Company's historical peak demands for 2012 through 2014 are shown in Exhibit 1.[14] The actual loads provided in Exhibit 1 are not weather normalized, which is particularly important as 2012 and 2014 were characterized by unusual and extreme weather conditions. The Company's peak demand is relatively sensitive to shifts in temperature. This is primarily due to an 82-percent saturation of central and window air conditioning in the residential class. As indicated in Figure 7 on the following page, the peak demands for the Company's three types of customer classes are positively correlated with temperature. Although each class exhibits a positive correlation with temperature, the residential peak demand exhibits a far greater response to temperature than the other classes.

Additionally, there is a greater range of load factors for the residential and commercial classes versus the industrial class, as shown by the large fluctuation in peak demand levels between summer and winter months for these classes in Figure 8 on the following page.

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[13] Demand-Side Management category includes all energy efficiency, behavioral demand response and direct control demand response

[14] See Exhibit 1, Columns (c) through (e). The historical values for the Electric Distribution Company (EDC), Retail Open Access (ROA) load, and Bundled Load for the LSE are provided, both coincident to bundled peak demand (Lines 1-3) and coincident to MISO peak demand (Lines 4-6).Contrary to the footnote originally provided by Staff on Exhibit 1, the historical values are net of demand-side reductions such as the Company's energy efficiency programs; however, the impact of these peak reductions was less historically than for forecasted years.

Figure 7: Correlation Between Peak Demand & Temperature (2011-2013)

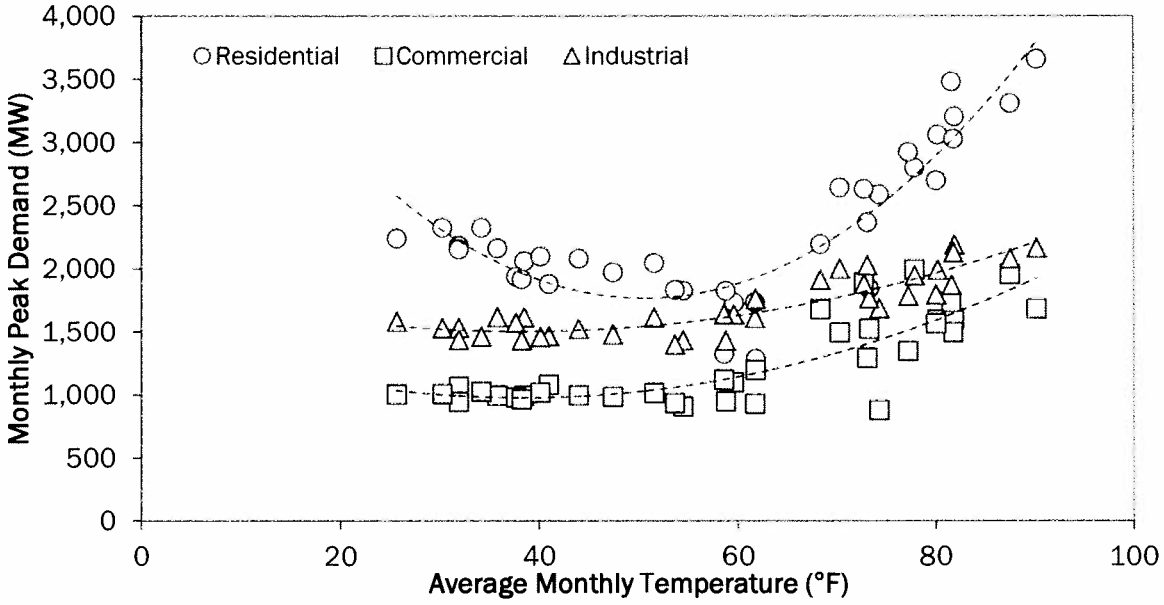
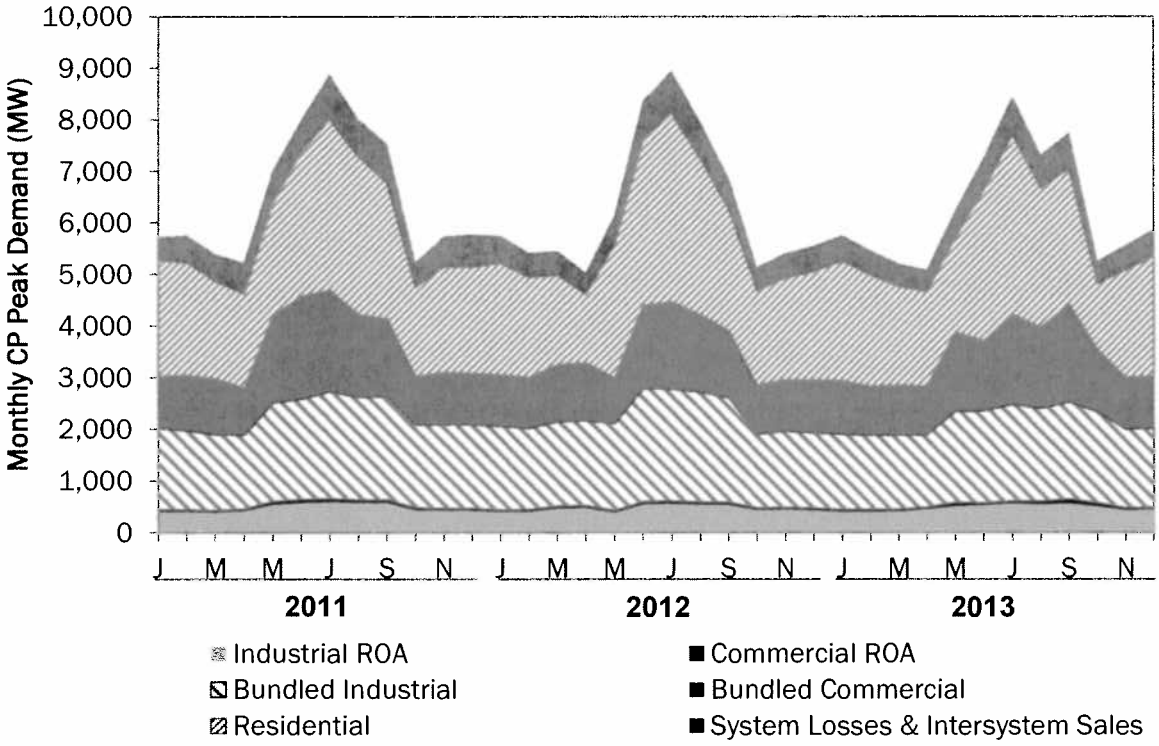


Figure 8: Monthly Peak Demand by Customer Segment



Forecast

The forecasted peak system demand shown in Exhibit 1[15] includes servicing demand associated with the following:

- Bundled service;
- Retail Open Access (ROA) customers;
- Demand otherwise avoided through interruptible service and other future demand response programs expected to be registered as capacity resources with MISO;
- Demand otherwise avoided through energy efficiency programs;
- Demand otherwise avoided through Smart Energy programs;
- Transmission losses.

To capture the dynamics of the system, the Company's peak demand forecast shown in Exhibit 1 is based on the level of residential air conditioning saturation, average monthly temperatures and expected energy usage.[16]

The Company must plan for capacity during periods when MISO experiences its peak demand. The Company's forecast of peak bundled service demand (including transmission losses) during the period that MISO experiences its peak for the 2015-2019 capacity planning periods is shown in Exhibit 3[17]. The average transmission loss factor for the local balancing authority in which the Company operates is 4.2 percent[18].

ENERGY RESOURCES

The Consumers Energy Plan

Consumers Energy expects to draw on a diverse portfolio of energy resources to meet expected peak demand plus reserves, as shown in the capacity fuel mix chart in Figure 6 for year 2015. Those resources include: Utility-owned generation; long-term supply contracts; Demand-Side Management resources; and bilateral ZRC purchases.

[15] See Exhibit 1, Line 1, Columns (f) through (j)

[16] The forecasted bundled peak demand prior to any demand-side reductions is shown in Exhibit 1, Line 3. Exhibit 1, Line 3 is Line 1 less Line 2, the Retail Open Access (ROA) demand forecast coincident to bundled peak demand. Exhibit 1, Lines 4 - 6 correspond to Exhibit 1 Lines 1 - 3, but are the forecasted peak demands at the time of MISO's system peak.

[17] See Exhibit 3, Line 5. Line 5 is derived using a Consumers Energy diversity factor to MISO of -3.37 percent, based on historical analysis of peak occurrences, as shown in Exhibit 3, Line 4. Line 5 has also been reduced by Line 2, which includes projected Demand-Side Management programs that are netted from the peak load forecast rather than treated as supply resources. Line 2 includes projections for energy efficiency and Smart Energy (Dynamic Peak Pricing, Web Portal and Prepay programs).

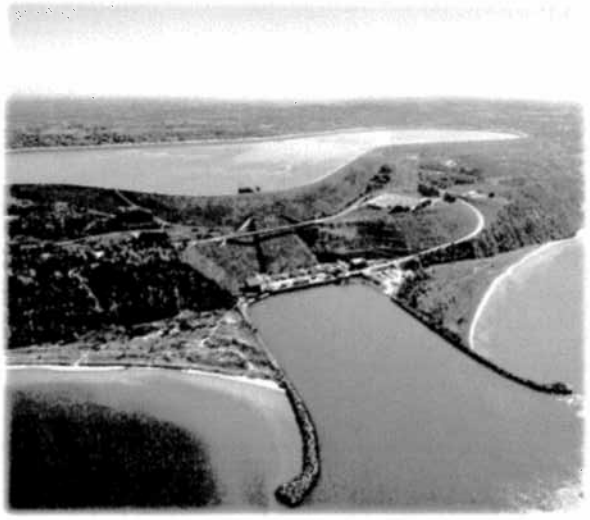
[18] The Company modified Exhibit 3, Line 9 to be equal to Exhibit 3, Line 7 (rather than Line 5 as originally proposed by the MPSC Staff). Furthermore, the Company modified Staff's formulas in Exhibit 3, Line 7 to be Line 5/(1+Line 6) consistent with MISO's calculation, and Exhibit 3, Line 8 to be Line 6 times Line 7.

The Company expects its supply portfolio to change to meet customers' future needs, as shown in Figure 9 on the following page.

Some key aspects reflected in Figure 9 include:

Consumers Energy is one of Michigan's leading suppliers of renewable energy.

- The addition of the Cross Winds Energy Park©, which began operating in December 2014. This is in addition to Lake Winds Energy Park©, which started commercial operation in November 2012, and 14 wholesale renewable energy supply contracts. Collectively, these resources have added over 500 megawatts (installed nameplate capacity) of new renewable generators since 2009. These resources are included as part of the blue-shaded area.
- Continuation of the Company's energy efficiency programs and other demand-side resources to help reduce the overall demand, as shown in the green area. These include all of the direct-control demand response programs included in Exhibit 4, plus the impact of energy efficiency programs and customer behavior-based demand response.
- Purchase of a natural gas-fueled, combined-cycle generating plant in Jackson that will add 542 MW to the supply portfolio, as shown in the yellow-shaded area.
- Continuation of existing resources including generating plants at the Campbell and Karn facilities; the Ludington Pumped Storage Plant; the Zeeland Generating Plant; and power purchase agreements with Entergy Palisades Nuclear Plant and the Midland Cogeneration Venture that will provide power beyond 2020, as shown in the blue-shaded area.
- Power supply contracts with other non-utility generators and other suppliers, a key part of the overall plan to provide reliable service to retail customers. These resources are also part of the blue-shaded area.

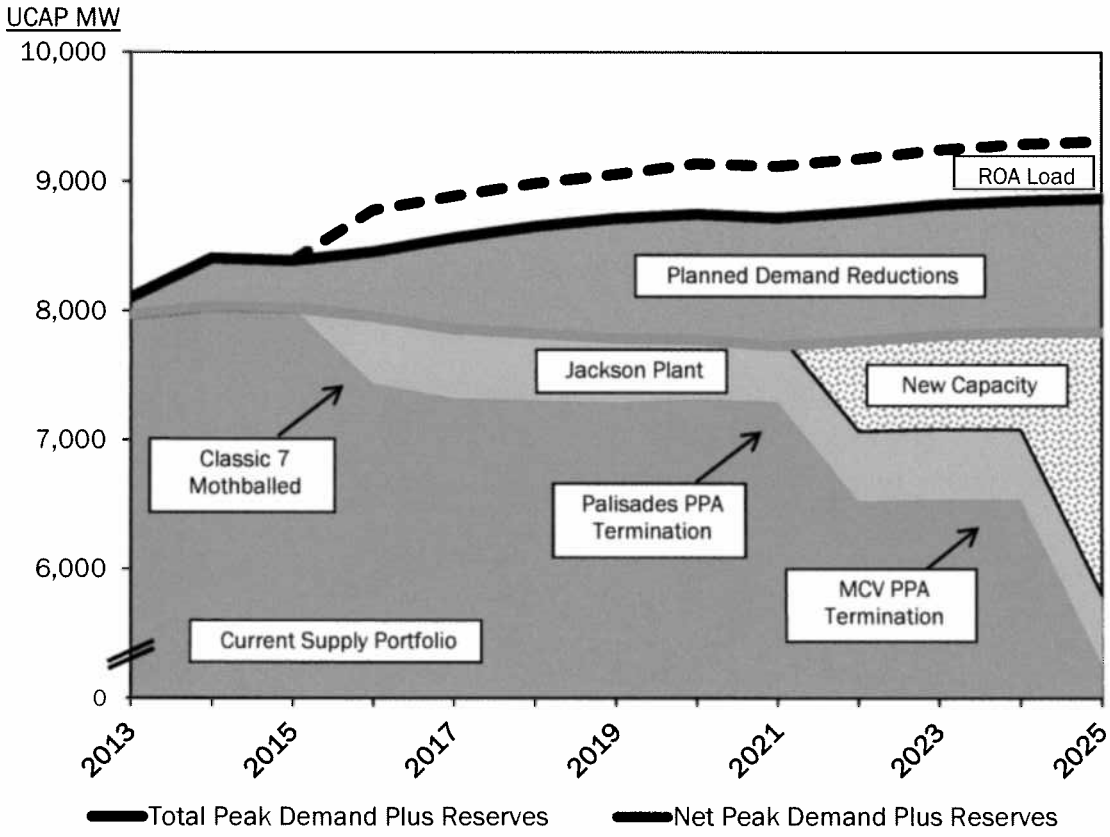


Consumers Energy's plans do not account for approximately 600 MW of electric load currently used by ROA customers. Including existing ROA load in the Company's capacity plans would cause undue cost burden on existing full service customers by requiring them to unfairly subsidize ROA customers.

If ROA customers return to bundled service, Consumers Energy would have to secure short-term capacity to serve that load. Building a new natural gas-fueled generating plant which could serve this returning load would take up to five years. Short-term capacity purchases serve a purpose for customers, but overreliance on them can prove risky.

Going forward, adequate electric resources may not be available to meet the needs of ROA customers. If prices rise and ROA customers choose to return to full utility service, Consumers Energy will need to respond by obtaining the capacity necessary to serve the returning ROA load. However, the current Company full service customers should not be asked to pay for building capacity to serve an uncertain customer base. Any long-term solution should be paid for by all customers that benefit from the capacity resources.

Figure 9: Consumers Energy Supply Portfolio



Utility-Owned Generation

Consumers Energy currently owns and operates 5,958 MW of installed capacity equivalent to 5,608 ZRCs, all located within Michigan and within MISO Zone 7. All units are expected to be available to serve peak demand conditions for the next five years.

Between late 2015 and early 2016, the Company is expected to complete the purchase of a natural gas-fueled, combined-cycle electric generating plant in Jackson, Michigan, which will provide an additional 542 ZRCs of capacity to the Company's electric resource portfolio. The retirement of the Classic 7 generating units in April 2016 will reduce the Company's electric resource portfolio by approximately 900 ZRCs. The Company has made up the capacity gap between the Classic 7 retirements and the purchase of the Jackson Plant with short term capacity purchases, re-ratings and upgrades of other Company generating units, and additional demand response load reduction programs.

The Company's forecast of owned resources is provided in Exhibit 3[19] (by category) and Exhibit 5[20] (by unit).

Long-Term Power Supply Contracts

Consumers Energy currently has long-term contracts with Non-Utility Generators (NUG) and other suppliers for 2,484 MW of installed capacity equivalent to 2,447 ZRCs. All units are expected to be available to serve peak demand conditions for the next five years. Consumers Energy's power supply contracts are entirely within Michigan and within MISO Zone 7, with the exception of the Heritage Garden Wind Farm located in Zone 2. However, this resource is only about 3 ZRCs in size, or less than 0.05 percent of Consumers Energy's total planning resources. This constitutes almost negligible risk.

The Company's forecast of Power Purchase Agreements is provided in Exhibit 3 (by category)[21] and Exhibit 6 (by unit) [22].

Other Bilateral Capacity Market Purchases

The Company held a reverse capacity auction for the 2015 through 2020 Planning Years on September 23, 2014. The ZRCs acquired are shown in Exhibit 3. Additional details were provided in MPSC Case No. U-17725.[23] The source of the ZRCs will not be known until they are transferred to the Company.[24]

Demand-Side Management

Consumers Energy offers many programs to its customers that help reduce peak demand. The Company refers to any program focused on changing the consumption of its customers as a "Demand-Side Management" or "DSM" program. DSM programs benefit customers and the Company by managing loads and stresses on the electrical system when needed most and

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[19] The Company modified Exhibit 3 provided by Staff to include breakdowns of owned resources which are classified as behind-the-meter-generation (BTMG), for both intermittent and non-intermittent resources, for consistency with power purchase agreement (PPA) breakouts. As shown in Exhibit 3, the majority of the Company's owned generating resources are non-intermittent and non-BTMG resources (Line 12). 17 ZRCs are non- intermittent BTMG resources (Line 14), 50 ZRCs are intermittent non-BTMG resources (Line 16), and 8 ZRCs are intermittent BTMG resources (Line 18).

[20] The Company's owned resources are shown unit-by-unit in Exhibit 5, on both an installed capacity (ICAP) and unforced capacity (UCAP) basis for the next five years. Details such as fuel type, location, and qualification as intermittent resources, BTMGs, and PA 295 resources are specified. Resources are only specified as PA 295 if they were built for the purpose of satisfying Michigan's renewable requirements. Existing hydro units, the Ludington Pumped Storage facility, and existing Public Utility Regulatory Policies Act (PURPA) PPAs also count toward the Company's 10-percent renewable generation by sales requirement but are not specified as such in Exhibit 5. The Company currently has no units designated as system support resources (SSR) by MISO for 2015 or beyond.

[21] The Company modified Exhibit 3 provided by Staff to break down power purchase agreements into categories based on intermittency and BTMG. As shown in Exhibit 3, the majority of the Company's PPA resources are non-intermittent and non-BTMG resources (Line 28). 47 ZRCs are non-intermittent BTMG resources (Line 30), 57 ZRCs are intermittent non-BTMG resources (Line 24), and 4 ZRCs are intermittent BTMG resources (Line 26).

[22] Details that are not expressly broken out in Exhibit 3, such as which resources are PURPA and PA 295, are shown in Exhibit 6. Furthermore, as in Exhibit 5, details such as fuel type, location, and qualification as intermittent resources and BTMGs are provided in Exhibit 6.

[23] MPSC Case No. U-17725: http://efile.mpsc.state.mi.us/efile/viewcase.php?casenum=17725

[24] Line 42 in Exhibit 6 shows N/A for location, fuel type, etc.

channeling wholesale generation dollars back to Michigan customers and businesses. However, these programs do much more than help solve capacity needs; they also:

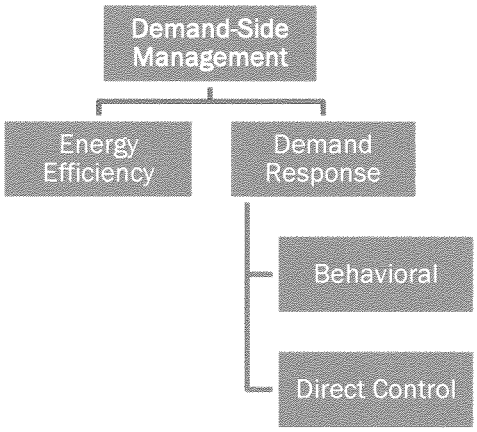
- Promote a partnership for solving Michigan needs with Michigan resources;
- Boost Michigan's economy;
- Help manage costs for all customers through lower power supply cost;
- Make use of otherwise idle customer-owned backup generators;
- Keep customers engaged in the state's energy needs and the Company's efforts to ensure safe, reliable and competitively priced power.

Collectively, the Company's DSM programs are expected to deliver about 900 MW of peak demand reductions by 2019. This peak demand reduction will be reached with programs targeting residential, commercial, and industrial customer classes.

As shown in Figure 10 below, the Company's DSM programs can be separated into two types of resources: energy efficiency and demand response. Demand response programs are further subdivided into direct control and behavioral programs. The DSM resources expected to be registered with MISO as a capacity resource are shown in Exhibit 4, which consist of the direct control programs. The customer behavior-based DSM resources and energy efficiency are expected to be netted from the load forecast, as shown in Exhibit 3.

Demand response resources which are registered with MISO must be able to be directly controlled to reduce demand with no more than 12 hours advance notice and sustained reduction for a minimum of four consecutive hours. The resources must be capable of being interrupted at least the first five times during the summer season for emergency purposes. The capability to reduce demand to a targeted reduction level and Measurement and Verification (M&V) protocol must be documented with MISO.

Figure 10: Demand-Side Management Program Structure



Energy Efficiency

Energy efficiency (EE) programs focus on reducing a customer's overall energy usage. Improving efficiency in homes and businesses is clean, smart and relatively inexpensive. Using less electricity helps stabilize volatile energy prices and solidify energy security. It also helps customers save money, providing a boost for Michigan's economy.

The 2008 Energy Law directed Michigan utilities to offer energy efficiency programs to customers. In the summer of 2009, Consumers Energy launched a comprehensive portfolio of electric and natural gas energy efficiency programs to achieve annual statutory energy savings targets.

The energy efficiency portfolio provides 12 residential programs offering incentives for customers who upgrade the efficiency of items such as lighting, appliances, insulation and windows. Commercial and industrial customers can choose from three programs:

- Comprehensive Business Solutions
- Multi-family
- Small Business.

These programs include prescriptive rebates and incentives, custom projects and several initiatives targeting agriculture, building operator certification, new construction and smart buildings retro-commissioning.

In addition to its energy efficiency portfolio. Consumers Energy offers initiatives to help customers use less energy. These include the Web Portal and Prepay programs implemented as part of the Company's Smart Energy Program.

While peak demand reductions are not the primary focus of EE programs, the act of reducing consumption at all times results in significant peak reductions. The Company expects 464 MW of peak demand reduction due to EE by 2019.

The peak demand reductions associated with these types of programs are not identified in Exhibit 4 because they do not meet MISO's criteria of controllable demand response resources. Typically, the impact of these programs is reflected in the company's load forecasts. At this time, registration of these resources is not required by MISO.

Demand Response – Behavioral

In general, demand response (DR) programs focus on shifting usage from peak periods to off-peak periods. In a behavioral DR program, the Company does not operationally require a customer to reduce load, but rather leverages messaging, incentives and penalties to encourage customers to use energy at different times.

The Company also will deploy a significant residential portfolio as part of the Smart Energy Dynamic Peak Pricing Program, resulting in 192 MW of peak demand reduction by 2019. Current plans forecast approximately 20 percent of residential customers participating in a behavioral DR program by 2020.

Consumers Energy plans to pilot additional Commercial and Industrial behavioral DR programs. Forecasting participation and the corresponding

peak load reduction that will result from C&I behavioral DR programs is difficult. Although the Company fully expects to offer several behavioral DR programs in the coming years, no capacity is currently included in the Company's 5-year plan associated with C&I behavioral DR programs. However, direct control C&I Demand Response is included, as discussed in the subsequent section.

The Metal Melting Primary Pilot Program is a behavioral DR program Consumers Energy currently offers to Commercial and Industrial customers.

The peak demand reductions associated with behavioral DR programs can consist of permanent or semi-permanent load shifting, which applies seasonally or year round similar to EE, and peak event load shifting, which applies only on the highest load days of the year. Depending on program design, it may be appropriate to register these types of resources with MISO as demand response resources. All behavioral DR programs in this capacity plan are netted from the Company's demand forecasts, as shown in Exhibit 3.

Demand Response – Direct Control

In a Direct Control DR program, the Company has direct contact with a device or facility manager and has the ability to command load reductions during peak periods. These types of programs represent the most firm demand resources available. Typically these are device control programs (i.e. air conditioning cycling and backup generation) or load shed commitment programs (i.e. guaranteed load reduction).

The Company currently offers one Direct Control DR program, Rate GI (Interruptible), but plans to deploy a residential air conditioning cycling program as part of the Consumers Energy Smart Energy Program. Additionally, the Company plans to employ Peak Load Management (PLM) and Direct Control Commercial and Industrial DR programs in the future.

The current plan calls for 15 percent of all customers with central air conditioning units to participate in the A/C cycling program by 2020. The Company expects 121 MW of peak demand reduction due to A/C cycling by 2019. Combined with Rate GI, Peak Load Management, and Direct Control C&I DR the Company will have about 245 MW of peak demand reduction from Direct Control DR programs by 2019.

The peak demand reductions associated with Direct Control DR programs consist of fixed or guaranteed demand reductions. These programs must be registered with MISO and are provided in Exhibit 4.

DSM Summary

Consumers Energy is committed to Demand-Side Management programs. DSM programs are good for the customers and the Company, which plans to pilot programs to determine the best solutions to reduce demand.

The three types of DSM programs: energy efficiency, behavioral DR, and Direct Control DR, each provide peak demand reductions in a different way. This ensures a diverse and comprehensive DSM strategy that is consistent with Consumers Energy's objective of maintaining a diversified portfolio of capacity resources.

Altogether, the Company's DSM programs are expected to deliver about 900 MW of peak demand reductions by 2019.[25] Consumers Energy remains committed to researching, developing and expanding Demand-Side Management programs as a long-term capacity solution.

Expanded overviews of all DSM programs are included in Appendix A-3.

Demand-Side Management programs will be expanded as part of Consumers Energy's long-term commitment to peak load reduction.

MISO Capacity Market Purchases

Consumers Energy does not expect to have any capacity shortfalls for the five years in this capacity plan, as shown in Exhibit 3 line 36. The Company has planned for and acquired all capacity needs for the five-year period, ensuring a continuous, reliable and affordable supply of electricity for serving its bundled customers. The Company does not plan to purchase capacity for ROA customers.

RESOURCE UNCERTAINTIES

Classic Seven FERC Waiver (The "6.5 Week Problem")

If Consumers Energy's Classic Seven plants are to be considered capacity resources by MISO during the 2015/16 Planning Year, the current MISO rules would require the Classic Seven to be available for service for the entire Planning Year through May 31, 2016, even though operations at the Classic Seven will be suspended 6.5 weeks earlier in order to comply with the EPA's MATS requirements. During this 6.5-week period, demand for electricity is significantly less than the annual peak demand. Thus, from a good utility practice standpoint, replacement of the Classic Seven capacity would not be necessary until June, the start of MISO's 2016/17 Planning Year.

MISO's rules provide that generation owners may withhold up to 50 ZRCs from the Planning Resource Auction; holding out more than 50 ZRCs exceeds MISO's threshold for physical withholding and subjects the generation owner to mitigation penalties, under which MISO can file a complaint at FERC against the generation owner. If physical withholding is shown to have taken place, the generation owner can be fined an amount equal to the megawatts affected multiplied by the market clearing price. Since the Planning Year does not align with the Company's retirement date for the Classic Seven due to MATS, MISO's current Tariff requires any ZRCs provided by the Classic Seven to be replaced upon retirement for the remainder of the 2015/16 Planning Year.

[25] Only the Direct Control DR programs are expected to be registered with MISO as capacity resources and awarded ZRCs. The impacts of all of the remaining programs on peak demand are expected to be captured in the Company's demand forecasts. At this time, the Company does not believe registration of behavioral based resources is required by MISO.

It is not certain that the Company will be able to find available replacement ZRCs (especially in Zone 7) and it is equally uncertain that if such ZRCs could be located whether or not they could be purchased at a reasonable price. Instead, it is possible Consumers Energy will have to purchase replacement ZRCs either bilaterally or in the annual auction (see MISO's recent filing below), even though the Classic Seven will remain available through the MATS effective date, including during the time of the summer and winter peaks. In order to avoid unnecessary capacity expenses for customers, Consumers Energy has asked FERC for a waiver for the 6.5-week period after the Classic Seven are retired, which would allow the Classic Seven capacity to be excused from the replacement requirement for the balance of the 2015/16 Planning Year (Docket No. ER15-435-000).[26] MISO has opposed Consumers Energy's waiver request, as well as similar requests from other utilities within the MISO footprint.

On January 28, 2015, MISO made a Tariff filing which would allow generators like the Classic Seven to be withheld from the Planning Resource Auction without facing physical withholding penalties (the "MISO Filing"). Since the MISO Filing still does not provide for any recognition of the capacity that the Classic Seven is capable of providing for the vast majority of the Planning Year, it does not address the Company's obligation to avoid unnecessary expenses for customers associated with purchases of ZRCs for the entire Planning Year to replace the Classic Seven capacity which will not be available for the final 6.5 weeks of the 2015/16 Planning Year due to the retirements of those plants.

It remains unknown whether or not FERC will approve the Company's 6.5-week waiver. If not, and if FERC approves MISO's January 28, 2015, Tariff filing, Consumers Energy may be subject to the cost of purchasing capacity in the 2015/16 Planning Resource Auction, which could reach over 10 times the $6,114/MW-year price cleared in the 2014/15 Planning Resource Auction. DTE Electric Company faces a similar issue with its MATS waiver request regarding its Trenton Channel plant.

If FERC does not resolve the issue by granting waivers, the MPSC has the authority to change the state's Planning Reserve Margin Requirement for the 6.5-week period in question. Pursuant to the MISO Tariff Module E-1 Section 30.0.0[27], the MPSC could establish a Planning Reserve Margin for state utilities which applies for the 6.5-week period during which the Classic Seven will be unavailable during the 2015/16 Planning Year. This could enable Michigan utilities to avoid the financial consequences of existing MISO rules.

Absent a FERC waiver or a change to the state's reserve margin requirement, the Company and DTE will be obligated to find replacement capacity for the 6.5-week period at prices for which the MISO Tariff does not establish any limits. Holders of ZRCs that did not clear in the March 2015 Planning Resource Auction will have significant negotiating leverage since they know that (i) market participants needing replacement ZRCs must purchase such ZRCs to avoid a failure to comply with the MISO Tariff, which would subject such market participants to unspecified charges, penalties, or other remedies or sanctions as recommended by MISO and approved by FERC, and (ii) there is a significant lack of transparency in terms of available ZRCs and whether there are more or fewer replacement ZRCs needed than exist. Consumers Energy is committed to working with the MPSC and other stakeholders to reach the best solution for customers and the state.

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[26] Consumers Energy's original waiver request was filed in FERC Docket ER14-2622-000, but after the original request was denied a revised application was filed in FERC Docket ER15-435-000. As of February 16, 2015 the Application remains unanswered.

[27] The MISO Tariff as approved by FERC on June 11, 2012 (Module E-1 Section 68.A.7.31.b) allows state Commissions to set planning reserve margins lower or higher than those determined by the LOLE Working Group. If a state Commission sets a different planning reserve margin than MISO, MISO will defer to the state Commission.

Zonal Resource Credit Uncertainty

The amounts of ZRCs from generation resources that are available for use by a Load Serving Entity are dependent, in general, upon annual capacity tests, historical availability performance over a rolling three-year period, and the amount of Network Resource Interconnection Service secured under an interconnection agreement with MISO. Such capacity tests must be corrected to the historical average temperature of the date and times of MISO's coincident summer peaks, measured at or near the generator's location, for a rolling five-year period. New generation resources, resources returning from suspension, and resources that are not required to provide availability performance data to North American Electric Reliability Corporation (NERC) may have performance data imputed to them based on historical data collected by MISO for the technology type and size of the generator. The amount of ZRCs from intermittent resources, such as wind, solar and run-of-river hydro are contingent upon their output during certain peak hours designated by MISO over the summer months of June, July and August over a period of several years. All of the foregoing elements introduce varying degrees of uncertainty with respect to the amount of capacity that will be available to the Company in the future.

The Company's oil and natural gas-fueled DE Karn Units 3 and 4 will return from suspension for the 2015/16 Planning Year and are required by the MISO Tariff to conduct a capacity test prior to returning to service. Due to on-going repair work and current fuel delivery limitations, the Company is unable to conduct such a test prior to the Fixed Resource Adequacy Plan (FRAP) deadline but will be able to test the units prior to the start of the 2015/16 Planning Year. As a result, the MISO Tariff requires the Company to estimate the amount of ZRCs it will need from these units to meet its Planning Reserve Margin Requirement, include these ZRCs in the Company's Fixed Resource Adequacy Plan, and post security against potential failure of the subsequent capacity test producing the ZRCs estimated. The Company will also be required by the Independent Market Monitor to offer additional ZRCs into the Planning Resource Auction, if the expected result of the capacity tests produces ZRCs in excess of the Planning Reserve Margin Requirement, which may also require the Company to post additional security. The Company may have a similar situation with Ludington Unit No. 2 which is expected to complete a capacity upgrade by the end of February 2015. After all tests are complete, the Company expects to have all Planning Reserve Margin Requirements covered for the 2015/16 Planning Year.

MISO's Capacity Market

Discussions have been ongoing in the MISO stakeholder process regarding the future of the MISO capacity construct. Some stakeholders, including Independent Power Producers (IPPs) have pushed MISO to adopt a longer-term construct, such as the three-year forward capacity construct used by PJM. Other stakeholders, including Consumers Energy, have advocated for a seasonal capacity construct.

A seasonal construct would improve the current annual construct. If MISO were to adopt a seasonal approach, capacity requirements would be based on seasonal peaks instead of annual peaks, allowing for greater flexibility, especially as capacity requirements are significantly lower during shoulder months. For example, the Classic Seven could be used to meet capacity requirements in the summer, fall, and winter of 2015 and 2016 before their April 2016 retirement. Replacement capacity would then only need to be purchased for the spring of 2016, and since demand would be lower during the spring than in the summer, the amount of replacement capacity needed would be lower as well. Unfortunately, a seasonal construct is unlikely to be in place prior to 2017 due to the time required to develop appropriate Tariff language, and it remains uncertain if MISO will move in this direction. MISO has not yet budgeted the resources needed to make such a change.

Demand Response Resources

The Company's estimates of the amount and type of capacity it will have available in future periods are subject to some measure of uncertainty. The Company is developing a number of demand response and price response resources as part of its Smart Energy program that will rely heavily on customer behavior. However, the number of occasions where the electric system becomes stressed to the point where high confidence in precise performance of these programs matters is limited. Accordingly, the Company will need to be prepared to adjust plans as the performance of the behavioral programs is observed and as customers enroll in the controllable programs.

As part of the Company's plan, it is assumed that some customers may be willing to interrupt their normal utility supply and instead use emergency generators for short periods of time. The Company's Peak Load Management (PLM) Program used this resource between 2001 and 2007 when prices were adequate to allow customers to cover their cost of maintenance and testing of their backup generators. With rising capacity prices, the Company anticipates customers will consider participating in the PLM program again. However, since 2007, there have been changes in environmental regulations affecting emergency generators. As customers are contacted to explore their interest in participation in PLM, the Company may find the cost to modify existing generators to comply with EPA Tier 4 emissions regulations applicable when generators are operated on a discretionary basis (i.e., when normal utility service is available) is more expensive than the cost of competing capacity resources. Accordingly, the Company will need to ensure customers are fully aware of the emissions regulations applicable to generators responding to dispatch instructions and assist customers in evaluating whether compliance modifications are likely to be economic. The Company may also need to make multi-year commitments in order for any modification costs to be amortized over the commitment period.

Also with regard to the Peak Load Management program, the Company previously provided notice of activation as much as 24 hours in advance and limited use of the program to certain periods of the year. Those features allowed generators to order fuel and assure the generator was adequately staffed while limiting exposure to periods when the probability of activation was greatest. The PLM program allowed energy intense operations to shift production to a different time period. Under MISO's rules, the Company does not believe it can provide activation notice as far in advance, nor does it believe that the use of the program can be limited to certain periods of the year. As a result, fewer customers may participate or fewer customers may be willing to participate at prices that are economic compared to alternative capacity sources.

Environmental Regulations

The Company has discussed its plans to comply with environmental regulations and potentially the Clean Power Plan proposed by the EPA. While the Company has an understanding of existing and upcoming regulations and has considered those regulations in its plans for the future, those regulations could change in ways that may affect plans in a manner that is unexpected or adverse to the customer's interests. Furthermore, the Company currently contracts with approximately 55 suppliers providing about 2,500 MW of capacity. Nearly one-third of the capacity used by the Company is purchased from others under long-term agreements negotiated long before some of

today's environmental regulations were envisioned. As a result, new regulations could create ambiguity as to the product that was sold to the Company and the price paid to the supplier. Michigan's PA 295 created Renewable Energy Credits (RECs) and to address the issue as to who between the purchaser and the seller owned the RECs under long term PURPA contracts, deemed that 80 percent of the RECs belonged to the purchaser and 20 percent belonged to the seller. If there is a similar "carbon credit" associated with the Clean Power Plan, similar accommodations may need to be reached and may have an impact on the Company's resource plan.

The Company has little knowledge regarding the suppliers' economic ability to comply with additional environmental regulations. While it is anticipated suppliers will manage their operation to maximize their profits while complying with all contractual and regulatory obligations, at some point changes in environmental regulations may make contract termination a least-cost alternative. If that occurs, the Company would need to identify and purchase replacement capacity or pursue other options so as to comply with MISO's Resource Adequacy requirements.

Independent Power Producers (IPPs)

Similar to the discussion regarding environmental regulations, risks exist associated with Independent Power Producer (IPP) supply, particularly as the end of the Company's current contracts approaches. Typically, the Company's contracts call for the parties to provide notice if they elect to terminate the contract effective on a date certain, such date not being earlier than a specific anniversary of the beginning of the contract, Commercial Operation Date (COD) of the plant or other "beginning" date. Some contracts terminate on a date certain but allow for a party to extend the contract by providing notice prior to some date certain.

The window between when the notice is required to be provided and when the contract terminates is usually too short to build a new facility. That means either a new facility must be under construction at the time the notice is provided or the notice must be provided early, or there is a period between when the contract ends and the replacement facility is available, during which purchased capacity is required. The Company faces several terminations; however, two such events are significant over the next 10 years: the termination of the Entergy Palisades contract in 2022 and the termination of the Midland Cogeneration Venture (MCV) contract in 2025. While neither event is in the scope of this plan filing, both events are noted due to their significance on the Company's long-term capacity portfolio.

IMPACT OF ELECTRIC CHOICE

For planning purposes, Consumers Energy's electric tariff provides for the return of ROA customers to bundled service with as little as 60 days' notice, depending on the customer's expected return date. Consumers Energy will provide service to returning customers who do not provide adequate notice, but with additional charges as defined by the market-based rate structure in the tariff.

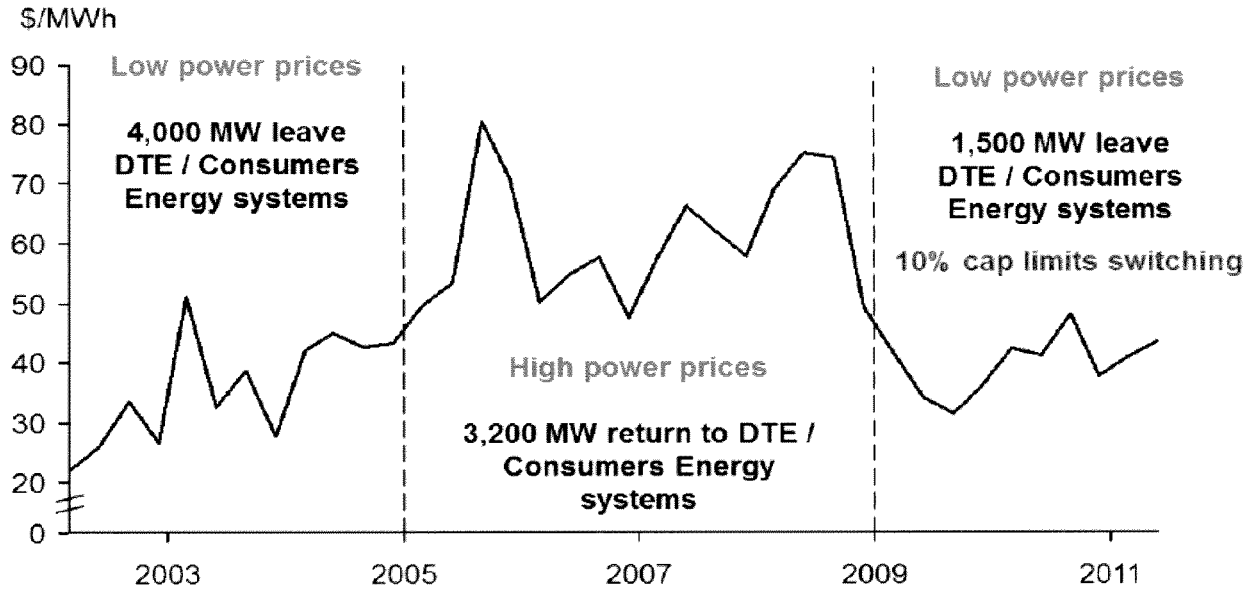
Currently, costs of providing capacity are not being fairly allocated between utilities and Alternative Energy Suppliers. The MISO capacity market sets the capacity prices that most Alternative Energy Suppliers pay through the Planning Resource Auction (PRA). The clearing prices in the PRA also significantly influence bilateral capacity prices. Both PRA and bilateral capacity prices significantly undervalue the capacity, and likely will do so again at future times depending on the balance of supply and demand.

Over the past six years the capacity that has been needed to meet reliability criteria in Michigan's Lower Peninsula has been almost entirely paid by the full service customers of Consumers Energy

Company and DTE Electric Company. Accordingly, ROA customers have avoided their fair share of the costs to maintain reliability. In the future, Consumers Energy does not plan to financially burden existing utility customers with subsidizing costs for ROA customers which may elect to return to full service for a minimal term.

Michigan's current hybrid electric choice program exposes customers to excessive risk and excessive cost. The market is entering a period in which capacity prices are generally expected to increase from depressed levels that have existed since 2008.

Figure 11: Michigan Electric Choice Impact on Load Volatility[28]



As capacity prices increase, the Company anticipates the economics of taking service from Alternative Energy Suppliers may follow, resulting in some customers potentially electing to return to full service from the electric utility. Figure 11 shows how historical volatility in electricity prices has caused dramatic shifts in ROA customers leaving and returning to bundled service. 4,000 MW shown in Figure 11 is equivalent to about six large power plants with 30-year lives. In a period when capacity is in scarce supply, the election of several large customers to return to utility service may make the utility capacity deficient, with inadequate time to acquire replacement capacity prior to the start of a Planning Year. As a result, all customers, even those that have been full service customers for many years, may be exposed to higher capacity costs and more frequent emergency conditions.

The Company's supply strategy has historically attempted to balance long-term and short-term costs and benefits in a manner that optimizes costs for customers. With the advent of ROA, the Company's supply strategy has become focused on the short term. While the Company is not privy to the supply strategy of the Alternative Energy Suppliers, the nature of their contracts with customers likely limits their ability to implement long-term supply strategies as well. Collectively, the ROA program has diminished the long-term strategies for serving customers of Michigan and has increased reliance on shorter-term, more volatile strategies.

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[28] SOURCE: Michigan Jobs & Energy Coalition - "Appendix A" Study - Joint Repsonse from DTE Energy, Consumers Energy and MEGA. Calculation of generation MWs moving to and from choice includes transmission losses and reserve margin requirements.

AFFILIATE DEALINGS

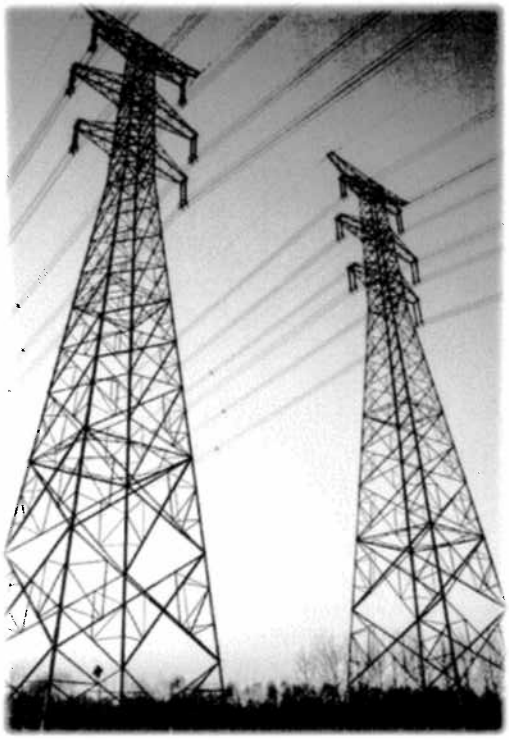
Consumers Energy has long-term Non-Utility Generator contracts with affiliates Grayling Generating Station Limited Partnership, TES Filer City Station Limited Partnership, and Genesee Power Station Limited Partnership. Additionally, the Company recently purchased ZRCs from CMS Energy Resource Management Company as part of its September 23, 2014 reverse capacity auction. The details of this transaction were provided in MPSC Case No. U-17725.[29]

INTERCONNECTION OF MERCHANT GENERATING PLANTS

During the last five years, approximately 840 MW of new merchant plant generation has been brought into service in the state of Michigan. Approximately 280 MW (nameplate capacity) of that amount is providing service to the Company and is included in the Company's purchased resources shown on Exhibits 3 and 6.

TRANSMISSION AVAILABILITY AND RISKS

Consumers Energy is a transmission customer of MISO[30], which provides Network Integration Transmission Service (NITS) under its FERC-approved tariff. Michigan Electric Transmission Company (METC) owns the transmission system interconnected to Consumers Energy's distribution facilities. MISO is the independent operator of METC's transmission facilities. Consistent with their respective NERC registrations, both MISO and METC are responsible for ensuring reliable operation of the transmission system. Based on these NERC obligations, there should be little risk regarding transmission availability, because MISO and METC are obligated to maintain the transmission system in a manner for sufficient imports.



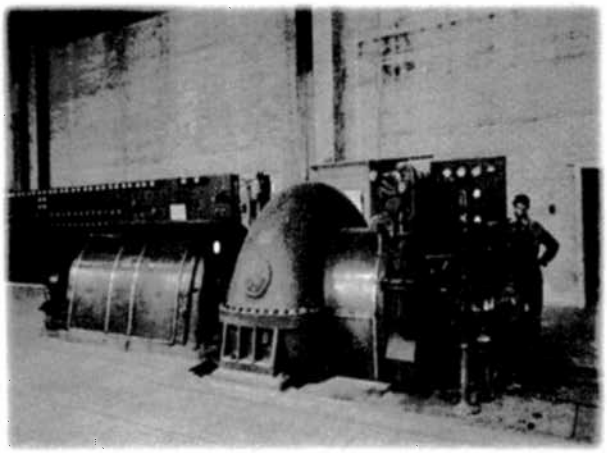
Consumers Energy has limited power to increase the transmission system's capability to handle imports into Zone 7, as the Company is currently not a transmission owner. Likewise, METC is restricted in its ability to build transmission to facilitate further imports into Zone 7, unless such a project will have a sufficient benefit-to-cost ratio to qualify as a Market Efficiency Project. However, the transmission system should not hinder Consumers Energy's ability to meet its capacity requirements, as the system is capable of importing far more power into Zone 7 than needed while meeting Zone 7's Local Clearing Requirement. New transmission will not need to be built in the near future to facilitate imports; instead, new generation resources in Zone 7 will be needed in order for Zone 7 to avoid Cost of New Entry capacity costs.

[29] MPSC Case No. U-17725: http://efile.mpsc.state.mi.us/efile/viewcase.php?casenum=17725

[30] The Company filed to reclassify certain high voltage distribution system assets as transmission on January 23, 2015.

The Company has not acquired any capacity or ZRC contracts from resources outside of Michigan or the MISO reliability footprint for the 2015 Planning Year and beyond.[31] As a Load Serving Entity market participant in the MISO Energy Market, Consumers Energy has a sustained commitment requirement to offer its available ZRC resources into the Market on a daily basis. Because MISO pools the resources of all LSE market participants in the Reliability Assessment and Commitment process, the Security Constrained Economic Dispatch (SCED) resources actually used to serve the demand of the Company's customers may or may not be supplied from within the state of Michigan. Nevertheless, the output of necessary SCED resources will be transmitted to Consumers Energy's distribution system via the Company's Network Integration Transmission Service (NITS) reservation within MISO.

CONCLUSION



Consumers Energy has been supplying Michigan with affordable, reliable capacity and energy for nearly 130 years.

As Michigan's largest utility and second largest investor, Consumers Energy has a diverse and flexible portfolio of energy sources available to reliably and affordably serve its customers, including coal, natural gas, wind, hydroelectric power and other fuels.

As detailed in this self-assessment, Consumers Energy is well positioned to continue to serve its current bundled customers over the next five years. The Company does not expect to be short of capacity to serve the load of its existing full service customers in any of the five upcoming Planning Years.

Consumers Energy is making efforts to couple new generation resources including the acquisition of the natural gas-fueled Jackson Plant with continued operations of the remaining generating plant fleet, and a diverse renewable energy portfolio. The Company's long-term commitments to energy efficiency and demand response will also serve to reduce capacity needs.

Consumers Energy is also delivering value to its customers by:

- Proposed reduction of electric rates by 5 to 15 percent for businesses while keeping residential bills below the national average.[32]
- Saving customers $855 million through its energy efficiency programs.
- Continuing to provide renewable energy through the portfolio which was established ahead of the schedule mandated by Public Act 295.
- Providing customers energy management choices through rollout of its Smart Energy program.

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[31] The source of the ZRCs acquired by the Company in its September 23, 2014 reverse capacity auction will not be known until they are transferred to the Company.

[32] Includes forecasted impacts of the Company's requests in pending U-17735 2014 electric rate case and pending U-17688 cost allocation and rate design (Public Act 169) case, which are subject to MPSC review and approval.

Customers can count on Consumers Energy **24 hours a day, 7 days a week, 365 days a year.**

That commitment continues even as new and changing federal regulations transform Michigan's energy landscape. Michigan's Lower Peninsula (MISO Zone 7) is forecasted to be short in capacity in the near future. Capacity prices in Zone 7 are likely to reach the Cost of New Entry within the next three years.

Consumers Energy is investing $15 billion over the next 10 years in areas such as reliability, renewable energy, environmental quality and Energy Efficiency.

The changes coming to Michigan's energy landscape may result in many ROA customers seeking a return to the stability and savings from regulated utility rates. ROA fosters uncertainty that makes long-term capacity planning very difficult. Consumers Energy's current plans do not account for a rapid influx of ROA customers returning to full utility service. It is not fair to existing full service utility customers to incur the costs of building and maintaining additional generating resources when they are already subsidizing the capacity costs of ROA customers whose return to bundled service is uncertain.

Consumers Energy is committed to working with stakeholders to structure a new energy policy that puts Michigan first and serves all electric customers. The state's next energy policy must balance the goals of affordability, reliability, and the transition to cleaner energy sources.

This will allow Consumers Energy to continue providing affordable, reliable capacity and energy and valuable services to improve its customers' quality of life.

Consumers Energy

Count on Us

APPENDIX A-1: MISO Calculation of CONE

MISO determines CONE values for its entire system and for each Zone every year, and files the calculated values at FERC for approval. MISO most recently made such a filing on September 8, 2014 in FERC Docket No. ER14-2808. Section 69A.8.a of Module E-1 of MISO's Tariff requires MISO and the Independent Market Monitor (IMM) to consider factors such as:

1. Physical factors, such as the types of generation that could reasonably be constructed to provide Planning Resources and the associated costs of that generation
2. Financial factors, such as the debt/equity ratio for those generation resources, the cost of capital, and a reasonable return on equity
3. Other factors, such as costs for permitting, environmental compliance, and operations and maintenance

In its most recent CONE filing, the IMM calculated CONE for each MISO Zone based on the costs associated with an advanced combustion turbine, and relied on information from the U.S. Energy Information Administration's (EIA) Updated Capital Cost Estimates for Utility Scale Electricity Generation Plant report. A Net Present Value analysis was used to determine an appropriate CONE value for a hypothetical new advanced combustion turbine for each Zone. The calculations also assumed:

1. A 50/50 debt to equity ratio.
2. A 20-year project life and loan term.
3. A 5.32 percent debt interest rate.
4. A 2.5 percent operation and maintenance escalation factor.
5. A 2 percent GDP deflator.
6. A 43 percent combined effective federal and state tax rate.
7. Property tax and insurance costs of 1.5 percent of capital costs.
8. A calculated weighted average cost of capital of 7.52 percent.
9. A 12 percent after tax internal rate of return on equity.

APPENDIX A-2: Demand-Side Management Expanded Overview

The Company offers many programs to customers that help reduce expected peak demand. Any program focused on changing the consumption of customers is referred to as a "Demand-Side Management" or "DSM" program. These programs are separated into two groups, energy efficiency and demand response. The Company plans to design programs for each customer class (residential, commercial, and industrial).

Energy efficiency (EE) programs focus on reducing the customer's overall usage. The Company has many of these programs and continues to expand the offerings each year. While peak demand reductions are not the primary focus of EE programs, the act of reducing consumption at all times results in significant peak demand reductions. The peak demand reductions associated with these types of programs are not identified in Exhibit 4 because they do not meet the criteria of demand response. Typically, the impact of these programs is reflected in the Company's load forecasts, and at this time registration of these resources is not possible or required by MISO.

Demand response programs focus on shifting usage from peak periods to off-peak periods. Demand response programs can be further sub-divided into Direct Control programs and Behavioral programs.

The Company's Rate GI (interruptible) program for large industrial customers is an example of a Direct Control program. Direct Control programs are typically registered with MISO as a capacity resource and are detailed in Exhibit 4.

The Company has a robust collection of DSM programs currently available and innovative new programs are being evaluated to help reduce peak demand. Of these programs, it should be noted that Rate GI (Interruptible), Direct Load Administration, Peak Load Management, and Commercial and Industrial demand response are expected to be registered with MISO as capacity resources and awarded ZRCs. The impacts of the remaining programs on peak demand are expected to be captured through its demand forecasts. At this time, the Company does not believe registration of these resources is possible or required by MISO.

The Company's Dynamic Peak Pricing ("DPP") program is an example of a behavioral program. DPP combines time of day rates with a dynamic critical peak component. Although similar to Direct Control in that the Company will call upon the customer during peak periods to reduce load, the customer has no obligation to take action. Instead, customers are encouraged to take action through a financial incentive, a financial penalty or through messaging. Behavioral programs are not registered with MISO and therefore are not shown in Exhibit 4.

Energy Efficiency

Energy efficiency (EE) programs are discussed in the Demand-Side Management Section of this report. Participation from 2009 through 2014 has resulted in $855 million in customer energy savings. Detailed plans for these programs can be found in the 2014-2017 Amended Energy Optimization Plan submitted on Aug. 1, 2013 in Case Number U-17351[33].

The Company has several EE type programs that are under development and evaluation. Many of these new programs leverage the new functionality introduced by the Consumers Energy Smart Energy Program or new consumer technology that has become available in recent years.

Customer Web Portal Pilot

The customer Web Portal will display smart meter interval data to customers. The Web Portal will produce long-term electric usage reduction for both residential and C&I customers. This reduction is achieved by providing residential customers the ability to review their energy consumption by day (hourly), bill (daily) or annually (monthly). Business customers will have the ability to review their energy consumption by day (15 minute), bill (daily) or annually (monthly). These customers will also have access to advanced online tools that will provide normative comparisons of their energy consumption and energy saving tips and strategies. Advanced tools that will be offered to customers include rate comparisons, bill forecasting, bill comparison, bill analysis, neighbor comparison, environmental impact, high bill notification alerts and detailed energy usage graphs that display costs, usage and weather over time.

The Web Portal is organized around two concepts. First, motivate consumers to change their energy usage behavior displaying their usage in an actionable context. Second, provide them with relevant personalized advice to capitalize on this motivation to use less energy and save money. Customers receive personalized targeted savings tips based on their energy usage patterns, housing characteristics, and demographics. The Web Portal was launched as a pilot in July 2013 with limited

[33] MPSC Case No. U-17351: http://efile.mpsc.state.mi.us/efile/viewcase.php?casenum=17351

meters deployed. The full program launch will begin in mid-2015 and continue deployment until all AMI meters are deployed at the end of 2017.

The program will include:

- Participation by 27 percent of all residential customers, resulting in a 5 percent reduction in electric consumption
- Participation by 10 percent of C&I customers, resulting in a 3 percent reduction in electric consumption
- 199,122 MWh electric savings through 2019 [34]

Prepay Pilot

A Prepay program offers customers a convenient payment option that enhances insight into usage by translating energy consumption into dollars. Customers pay an amount they can afford prior to consumption and reload as needed. Customers choose a communication channel to receive notifications on how much money is left on the account with an estimated number of days associated with those dollars. They have access to their consumption through the smart meter infrastructure to provide near real time information on total consumption, rate of consumption and predictive tools as their balance decreases. A small employee customer pilot was completed in June of 2014.

Customers will be able to access their account information via a dedicated Web Portal that will be optimized for mobile devices like tablets and smart phones. In addition to account balance information, the portal will provide tips and tools that the customer can use to reduce their use and extend the time between payments or reduce their payment.

By purchasing electricity in advance and receiving regular communication, customers will have the information they need to change their behaviors, lower total energy consumption and manage their cost.

The program will include:

- Ramped launch 2015 through 2017 for electric residential customers.
- 15,000 electric residential customer participants by 2017.
- Average 10 percent reduction in energy consumption, 14,700 MWh through 2017.[35]

Window Air Conditioning Pilot

The Window Air Conditioning (AC) pilot is an innovative technology pilot targeting customers with window air-conditioning units. Customers with window AC units have been historically difficult to assist with reducing energy usage and to engage in demand response offerings. New technology provides enhanced control to increase window AC efficiency and to provide load curtailment potential during peak periods. Plug level units, using wireless technology, create a remote connection to the window AC unit and add thermostat capability for better temperature control. The

[34] The demand impacts for behavioral programs can only be validated via Evaluation, Measurement and Verification (EM&V) after the fact. These assumptions are based on a study conducted by the Brattle Group and included in the Smart Energy business case filings. 2014 Electric Rate Case: http://efile.mpsc.state.mi.us/efile/viewcase.php?casenum=17735 and 2008 Electric Rate Case: http://efile.mpsc.state.mi.us/efile/viewcase.php?casenum=15645

[35] Same comments as footnote above.

customer has the ability to control the window AC unit remotely via phone and web application, enabling them to achieve comfort (precooling prior to arrival at home) without needing to run a unit during away periods. In addition, the thermostat creates temperature control at a specific setting, thereby reducing unnecessary overcooling. Like Smart Thermostats, the Company endeavors to learn what product features appeal the most to customers and what impact engagement with these products will have on long-term energy savings and summer demand response. The pilot was launched in 2014 and results will be evaluated in 2015.

Smart Thermostat Pilot

The thermostat technology available today can fill the performance gap left by inadequate and underutilized programmable thermostats. There are a significant number of customers who still use traditional non-programmable units. The incremental savings over traditional and underutilized programmable thermostats is potentially significant and may include long term behavioral savings and potential for use in demand response programs. As summer cooling can be a significant cost to customers and presents a component of peak load that is controllable, technology which provides both energy efficiency and demand response benefits has dual value. The Smart Thermostat pilot offers products to customers that further empower them to manage energy consumption. The pilot uses a variety of smart thermostats from different manufacturers. The Company will gather information about what product features appeal most to different types of customers based on the characteristics of their homes and technical ability, and what impact engagement with these products will have on long-term energy savings. For a subset of the pilot customers, the acceptance of the technology will be tested, as it relates to summer demand response. The pilot was launched in 2014 and the results will be evaluated in 2015.

Direct Control Demand Response Programs

In a Direct Control program, the Company has direct contact with a device or facility manager and has the ability to command load reductions during peak periods.

Interruptible Resources

The Company has developed and administered an electric rate that provides economic benefits to customers with at least 700 kW of load who are able to accommodate a service interruption during times of system emergency. The MPSC approved the rate, allowing the first 250 MW of load requesting the rate to obtain it. Customers who elect to receive service under the rate must sign a contract with a term of at least one year, with either party having the right to terminate at the end of the contract term by providing notice at least 60 days before the end of the contract period.

Since the Company does not plan for capacity for the load served under this provision, the Company provides a market-based credit against the On-Peak Demand component, which is equivalent to the market value of capacity. This rate has been very attractive to customers with heavy manufacturing and/or metal melting loads in the past. When MISO declares a Maximum Generation Capacity Emergency level EEA2, Consumers Energy notifies interruptible customers of the emergency and

follows up with more detailed information. Specifically, when the Company receives a Max-Gen Emergency EEA2, an automated notification is sent to all of the customer's contacts – often an on-site energy manager, facilities manager and security office, immediately mandating a reduction of load to the contracted firm service level.

Prior to an actual load shed order from MISO, in most instances, MISO will have previously notified the Company that conditions are expected such that an enactment may be ordered for certain hours within a certain control area. The Company will have passed along this notice to customers as soon as it was received from MISO so that customers would have the maximum time possible to plan for an interruption later in the day.

As the capacity market continues to tighten, Rate GI customers may conclude that MISO will be likely to reach Max-Gen Emergency EEA2 levels more frequently, and thus there is increased risk that fewer customers will elect to receive service under Rate GI. One of Consumers Energy's largest industrial customers recently removed itself from Rate GI in anticipation of a constrained capacity market. This is a clear signal that large sophisticated industrial customers are concerned about a capacity shortfall and potential interruptions in supply.

Direct Load Administration (DLA)

As part of Smart Energy implementation, the Company plans to begin offering Direct Load Administration programs to residential customers in 2015. Direct Load Administration refers to programs that enable the Company to control the load of its customers through automated systems. This program can be used to reduce load on peak demand days, reducing the need for energy purchases or construction of peaking generation capacity. In exchange for participation in the program, customers are given credits to reduce their energy bill.

DLA requires equipment to be installed at the customer's location that enables direct control on particular types of load (e.g. Air Conditioning units). Customers will receive a credit or a reduction on their bill for participating in DLA programs.

There are several systems that must be put in place to enable DLA programs. A smart meter is required so that the necessary data to complete measurement and verification can be captured and the meter communication network is in place as it will be one of the channels for communicating with load control devices. In addition to the smart meter, the Company needs a system that can manage and directly control the load devices that are in the field. All the required systems are expected to be in place by mid-2015.

The Direct Load Administration tariffs that were used during the 2010 pilot are still in place as well and will serve as a model for the programs that the Company deploys in 2015.

The program will include:

- A focus on residential customers with A/C
- A Demand Response Management System to manage events
- Installation of a communicating switch at customer's A/C unit is required
- Participation rate of 15 percent of residential customers with A/C by 2019
- Average peak load reduction of 1.12 kW per customer
- Forecasted impact of 108 MW peak reduction by 2019
- $100 million in cumulative avoided capacity through 2024

Peak Load Management

The structure of the Peak Load Management (PLM) program was designed to enable customers to partner with the Company to meet a portion of capacity needs during critical time periods. In the program, the customer essentially becomes an Independent Power Producer (IPP), providing "generation" capacity and energy during critical periods throughout the year. The Company may make contractual arrangements with customers who can self-generate power, shift peak load from on-peak to off-peak periods, or provide other forms of load reduction. The concept was reviewed with and embraced by the MPSC.

By participating in this program, Consumers Energy's customers can be compensated for generating their own electricity, thereby assuming their own electrical loads, or shifting energy intensive operations to an off-peak period. Customer reception to the program has been very positive from the inception of the program in 2000. In light of the new emissions requirements, conservative forecasts of PLM are included in Exhibit 4.

The PLM season is from May 15 through September 30, excluding national holidays. On-peak hours are from 11:00 a.m. through 7:00 p.m. The program requires self-generation and/or load shifting for the duration of that period only. Customers are typically notified by 1:00 p.m. the day prior to the program enactment. However, many facilities choose to enact stand-by generation with as little as 15 minutes notification. Contracts are typically written to include up to 10 enactments. In many cases, customers are protected from severe disruption by limiting the number of enactments in a week or in succession. Typically compensation includes capacity and energy payments.

Peak Load Management can provide additional options for Commercial and Industrial Customers. This peak reduction can be achieved in multiple ways, depending on the size and nature of the electric facilities and load. They could include cycling air conditioning units, similar to the residential Direct Load Administration program, changing thermostat or Building Management System set points, lighting control and process control adjustments.

Commercial and Industrial Demand Response Pilot

Commercial and Industrial demand response is being considered for a 2015 pilot, with expanded deployment in 2016. In exchange for participation in the program, customers are given incentives with some of the same characteristics as the PLM program. Load control is achieved through an automated system that signals and automatically controls loads authorized by the customer or provides automatic notification to the customer for direct action on their part.

Pilot enrollment is targeted at 25 small business customers with simple control schemes and 25 medium to large customers that will require more sophisticated communication, monitoring and control. The amount of reduction available for the pilot will be dependent on the solicited customer segments. There is about 50 MW of available capacity in the medium to large C&I customer base available in the 2017-2019 Planning Years.

Behavioral Demand Response Programs

In a behavioral program, the Company does not have any mechanism to direct a customer to reduce load, but rather leverages messaging, incentives, and penalties to encourage customers to use energy at different times.

Dynamic Peak Pricing

As part of the Smart Energy Program implementation, the Company plans to begin offering dynamic pricing programs to residential customers in 2016. The dynamic pricing program planned for 2016 is similar to a program that the Company piloted in 2010. This program will combine basic time-of-use pricing with a "critical peak" component. A critical peak event may occur as a result of factors such as economics in the energy market, an emergency event called by the regional transmission operator or a "local" emergency called by the Company's system operators. These events generally occur during periods of high air conditioning demand. Typically, the Company limited the critical peak event to "on-peak" period, 2 p.m. to 6 p.m., June through September.

Generally, critical peak programs are offered two ways. The first method is referred to as Critical Peak Pricing (CPP). In a CPP program, the rate charged for all energy consumed during a critical peak is significantly higher than the amount charged during the same time period when a critical peak event is not occurring. The second type of program is referred to as a Peak Time Rebate or PTR program. The PTR program generally has higher time-of-use rates during non-critical peak periods than the CPP program, but when a critical peak event is called customers who reduce consumption receive a credit for reducing their energy consumption. PTR programs tend to be more complex than CPP programs because they require significant calculations to determine the amount of energy consumption reduced. The significant advantage of a PTR program is that customers are not penalized if they choose not to reduce their consumption during a given event.

There are several systems that the Company must implement before these programs can be offered to its entire customer base. The smart meter captures the interval consumption data required for this type of program. Interval metering is critical to DPP programs because, as the price changes, the Company must be able to bill customers for the consumption during the appropriate time period. Several communication paths are used to communicate with customers in advance of a critical peak event, allowing customers to program thermostats or take other energy reducing actions during events. In addition to the smart meter, the Company must also put in place the necessary systems to initiate communication with the customer when a critical peak event is occurring. The Company currently plans on offering a CPP program beginning in 2016, but will maintain the necessary flexibility to add a PTR program if customers do not show sufficient interest in the CPP program. There also are many additional types of dynamic pricing programs, but the first step toward many of these is the successful implementation of a CPP or PTR program.

The program will include:

- A focus on all residential customers
- A Demand Response Management System will manage events
- Participation of about 20 percent of residential customers
- Average 0.63 kW reduction in peak consumption by participants
- Forecasted impact of 192 MW peak reduction by 2019

Behavioral Demand Response Pilot

The purpose of the Behavioral demand response pilot program is to understand if residential customers will reduce their energy consumption behavior during a utility's peak energy hours without a traditional demand response price signal. Customers receive a notification the day prior to a peak energy day event. The day after the event a post notification follow-up is sent to each customer letting them know how they performed during the event hours. Key components of the pilot that will be evaluated include:

- Persistence of energy conservation over time
- Peak demand reduction (kW)
- Market acceptance and communication channels
- Cost effectiveness & scalability

Metal Melting Primary Pilot

The Metal Melting Primary Pilot (MMPP) Rate was approved by the MPSC in its June 7, 2012 order in Case No. U-16794[36] and was designed to test price responsiveness of large energy intensive customers operating electric arc furnaces. The MMPP established time of day Power Supply charges for five summer time blocks, and four time blocks during the winter, both of which include a Critical Peak Event. The Company based the price of energy at each time block using the hourly differentials of MISO's Locational Marginal Prices ("LMP") at the Consumers Energy Load Node. The Company established the "high-peak" time period for the summer period based on the Company's historical highest hourly demand for a consecutive two hour window.

It was the Company's intent to narrow the "high-peak" window to a minimum time block, which would minimize operational disruptions to the customer, while providing the Company with reduced demands during the most critical capacity constrained time periods. The mid-peak and low-peak time periods were also developed using average LMP information, and reflect price differentials of energy at those time periods. MMPP also includes a Critical Peak time period, which can be triggered at any time when the MISO energy price at the Consumers Energy's Load Node exceeds the Economic Trigger price, which is defined as 150 percent of the High Peak Customer Vooltage Level (CVL) 1 price. A Critical Peak Event also occurs when a system integrity event is enacted. During a Critical Peak Event, the customer is required to pay the higher of the 150 percent of the High-Peak Price for their voltage level or the average LMP per kWh.[37]

In developing the MMPP Rate, an assumption is made that customers who have the operational flexibility and choose to be served on this rate will respond to the price signals by reducing load. In exchange for the high-peak and Critical Peak Event prices, the MMPP rate reflects an adjustment in capacity cost allocation. By taking advantage of the time price blocks and avoiding use at Critical Peaks with operational flexibility, the MMPP customers can obtain lower energy costs than if served under the comparable GPD rate.

At present, the Company has 15 customers taking service on the MMPP rate, and an additional customer is currently under construction and expects to be operational by 2016.

[36] MPSC Case No. U-16794: http://efile.mpsc.state.mi.us/efile/viewcase.php?casenum=16794

[37] Customer Voltage Level 1 is Transmission level service when voltage supplied to the customer is equal to or greater than 120,000 Volts. In MMPP rate, when the MISO LMP (at the Consumers Energy load node) exceeds 150% of the CVL 1 price, then it triggers a critical peak event, and the customers are then subject to the MISO price or 150% of the High Peak Price, whichever is higher.

APPENDIX A-3: ACRONYM DEFINITIONS

AC	Air Conditioning
AES	Alternative Energy Supplier
ASM	Ancillary Services Market
CDC	Capacity Deficiency Charge
BTMG	Behind the Meter Generation
C&I	Commercial and Industrial
CEL	Capacity Export Limit
CIL	Capacity Import Limit
COD	Commercial Operation Date
CONE	Cost of New Entry
CPP	Critical Peak Pricing
CVL	Customer Voltage Level
DA	Day-Ahead Energy and Operating Reserve Market
DLA	Direct-Load Administration
DPP	Dynamic Peak Pricing
DR	Demand Response
DSM	Demand-Side Management
EEA2	Maximum Generation Capacity Emergency level
EE / EO	Energy Efficiency / Energy Optimization
EDC	Electric Distribution Company
EM&V	Evaluation, Measurement and Verification
FERC	Federal Energy Regulatory Commission
FRAP	Fixed Resource Adequacy Plan
GI	Rate GI (General Interruptible)
ICAP	Installed Capacity
IMM	Independent Market Monitor
IPP	Independent Power Producer
LCR	Local Clearing Requirement
LMP	Local Marginal Price
LOLE	Loss of Load Expectation
LOLEWG	Loss of Load Expectation Working Group
LRR	Local Reliability Requirement
LRZ	Local Resource Zones
LSE	Load Serving Entity
MATS	Mercury & Air Toxics Standards
METC	Michigan Electric Transmission Company
MISO	Midcontinent Independent System Operator
MMPP	Metal Melting Primary Pilot

MW	Megawatt
NERC	North American Electric Reliability Corporation
NITS	Network Integration Transmission Service
NUG	Non-Utility Generator
OMS	Organization of MISO States
PA	Public Act
PJM	Pennsylvania – New Jersey - Maryland (PJM) Interconnection LLC, an RTO
PLM	Peak Load Management
PPA	Power Purchase Agreement
PRA	Planning Resource Auction
PRM	Planning Reserve Margin
PRMR	Planning Reserve Margin Requirement
PSCR	Power Supply Cost Recovery
PTR	Peak Time Rebate
PURPA	Public Utility Regulatory Policies Act
PY	Planning Year
RA	Resource Adequacy
REC	Renewable Energy Credit
RF	ReliabilityFirst
ROA	Retail Open Access
RT	Real-Time Energy and Operating Reserve Market
RTO	Regional Transmission Operator
SCED	Security-Constrained Economic Dispatch
UCAP	Unforced Capacity
VCA	Voluntary Capacity Auction
WP	Web Portal
ZDC	Zonal Deliverability Charge
ZRC	Zonal Resource Credit